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GOVERNMENT OF INDIA

RAILWAY DEPARTMENT

(RAILWAY BOARD)

109230

History of Indian Railways

Constructed and in progress

History of Indian Railways, constructed and in progress, corrected up to 31st March 1939.

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(2) Classified List of State Railway Establishment and Distribution Return of Establishment of all Railways. Published yearly. Price Rs. 1-12-0 or 3*s*.

(3) History of Indian Railways, constructed and in progress corrected up to 31st March 1933. Published sexennially. Price Rs. 6-0-0 or 9*s*. 9*d*.

(4) History of Services of the Officers of the Indian State Railways. Published biennially. Price Rs. 20-0-0 or 31*s*. 6*d*. (corrected up to 1st July 1937).

TECHNICAL PAPERS.

(5) Over 302 papers have been published by the Technical Section of the Railway Board's Office. The papers comprise :—

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(*b*) Reprints of articles from foreign engineering magazines.

(*c*) Reprints or abstracts of reports received by the Government of India on subjects connected with railways.

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Mymensingh-Bhairab Bazar	3′ 3⅜″	A. B. Ry. Co.	8
Mysore State	3′ 3⅜″	Mysore Durbar	135
N			
Nagda-Ujjain	5′ 6″	B. B. & C. I. Ry. Co.	39
Nilgiri	3′ 3⅜″	S. I. Ry. Co.	205
Nizam's State	5′ 6″ / 3′ 3⅜″	N. G. S. Ry. Co.	145 / 147
North Western	5′ 6″	N. W. Ry.	152
O			
Okhamandal	3′ 3⅜″	Jamnagar and Dwarka Ry. Co.	247
P			
Pachora-Jamner	2′ 6″	G. I. P. Ry.	104
Palanpur State	3′ 3⅜″	B. B. & C. I. Ry. Co.	52
Parlakimedi Light	2′ 6″	B. N. Ry. Co.	29
Peralam-Karaikkal	3′ 3⅜″	S. I. Ry. Co.	206
Petlad-Cambay, Anand-Tarapur section	5′ 6″	B. B. & C. I. Ry. Co.	41
,, ,, Tarapur-Cambay section	5′ 6″	B. B. & C. I. Ry. Co.	42
Phagwara-Rahon (Hoshiarpur Doab)	5′ 6″	N. W. Ry.	160
Piplod Devgad Baria	2′ 6″	B. B. & C. I. Ry. Co.	59
Podanur-Pollachi	3′ 3⅜″	S. I. Ry. Co.	208
Pondicherry	3′ 3⅜″	S. I. Ry. Co.	208
Porbandar State	3′ 3⅜″	Gondal	242
Pulgaon-Arvi	2′ 6″	G. I. P. Ry.	107
Purulia-Ranchi	2′ 6″	B. N. Ry. Co.	30
R			
Raipur-Dhamtari	2′ 6″	B. N. Ry. Co.	31
Rajpipla State	2′ 6″	B. B. & C. I. Ry. Co.	60
Rajpura-Bhatinda	5′ 6″	N. W. Ry.	169
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,, ,, (Jullundur Doab Extension) ..	5′ 6″	N. W. Ry.	183
,, ,, (Ludhiana Extension) ..	5′ 6″	N. W. Ry.	184
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A. B. RAILWAY SYSTEM.

REFERENCES.

A. B. Railway. ..... 3'-3⅜"

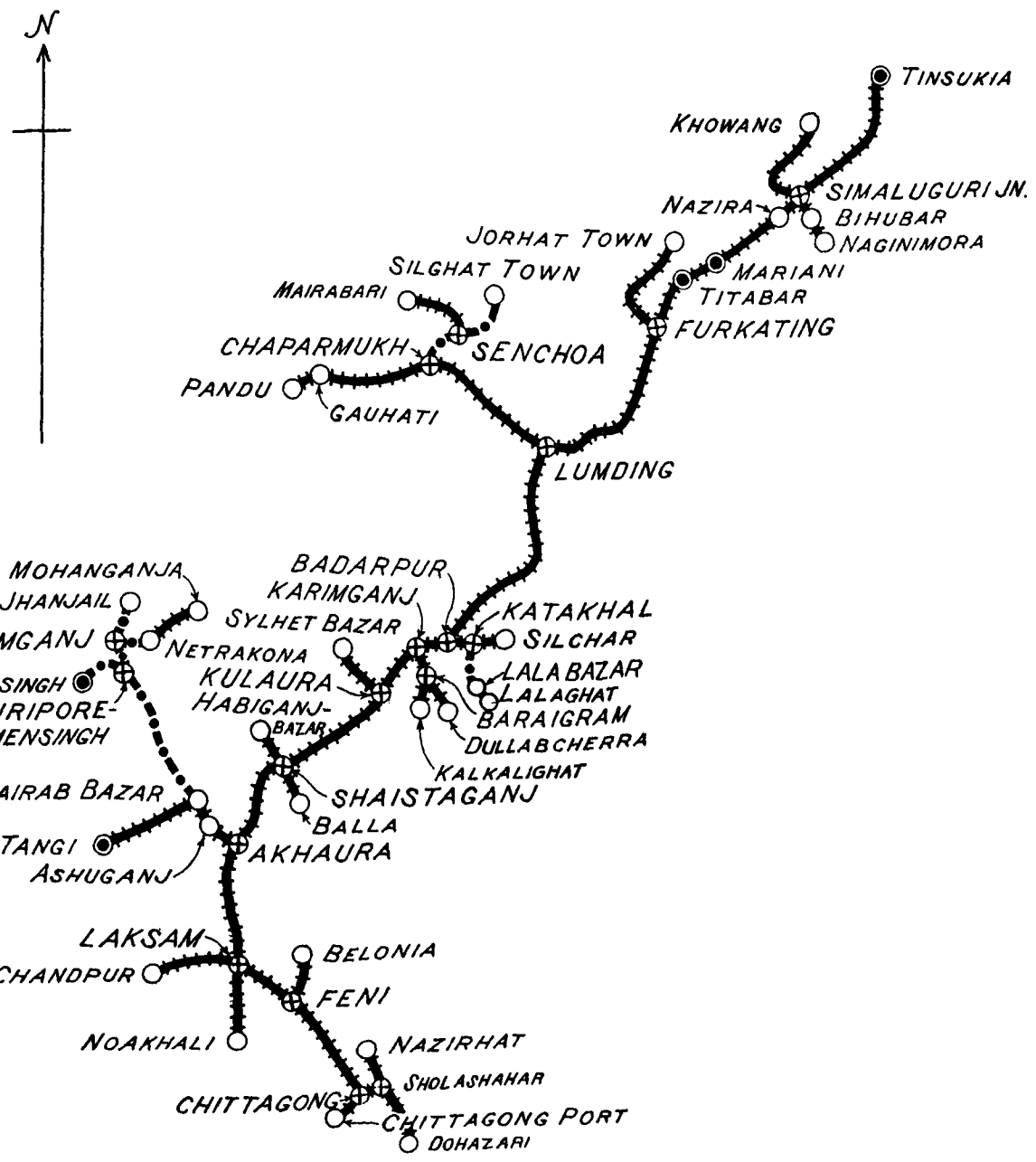
Private Companies' lines. .....

Home, Branch and Local line Junctions. .....

Junctions connecting Foreign lines. .....

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.



GENERAL.

From the year 1906-07 Interest on Debt in India has been calculated at the actual average rate for the year of interest on the mean non-specific debt of India, instead of at the fixed rates of 4 and 3½ per cent. previously employed. The actual rates from 1906-07 to 1918-19 were 3·437, 3·412, 3·384, 3·384, 3·377, 3·401, 3·500, 3·388, 3·499, 3·4725, 3·2964, 3·4730 and 3·4818 per cent., respectively. The rates for the years 1919-20 to 1938-39 calculated with reference to the Government of India, Finance Department, Despatch No. 424 dated the 30th October 1919, were as follows :—

1919-20	3·4076 per cent.	for expenditure to end of 1916-17, and
	5·9328 „ „	for subsequent expenditure.
1920-21	3·3252 „ „	for expenditure to end of 1916-17, and
	5·1979 „ „	for subsequent expenditure.
1921-22	3·3252 „ „	for expenditure to end of 1916-17, and
	6·1038 „ „	for subsequent expenditure.
1922-23	3·3252 „ „	for expenditure to end of 1916-17, and
	5·4800 „ „	for subsequent expenditure.
1923-24	3·3252 „ „	for expenditure to end of 1916-17, and
	5·6900 „ „	for subsequent expenditure.
1924-25	3·3252 „ „	for expenditure to end of 1916-17, and
	5·5400 „ „	for subsequent expenditure.
1925-26	3·3252 „ „	for expenditure to end of 1916-17, and
	5·6600 „ „	for subsequent expenditure.
1926-27	3·3252 „ „	for expenditure to end of 1916-17, and
	5·4300 „ „	for subsequent expenditure.
1927-28	3·3252 „ „	for expenditure to end of 1916-17, and
	5·3800 „ „	for subsequent expenditure.
1928-29	3·3252 „ „	for expenditure to end of 1916-17, and
	5·6300 „ „	for subsequent expenditure.
1929-30	3·3252 „ „	for expenditure to end of 1916-17, and
	5·3100 „ „	for subsequent expenditure.
1930-31	3·3252 „ „	for expenditure to end of 1916-17, and
	5·7000 „ „	for subsequent expenditure.
1931-32	3·3252 „ „	for expenditure to end of 1916-17, and
	5·6500 „ „	for subsequent expenditure.
1932-33	3·3252 „ „	for expenditure to end of 1 916-17, and
	5·5400 „ „	for subsequent expenditure.
1933-34	3·3252 „ „	for expenditure to end of 1916-17, and
	5·4300 „ „	for subsequent expenditure.
1934-35	3·3252 „ „	for expenditure to end of 1916-17, and
	5·2000 „ „	for subsequent expenditure.
1935-36	3·3252 „ „	for expenditure to end of 1916-17, and
	5·0500 „ „	for subsquent expenditure.
1936-37	3·3252 „ „	for expenditure to end of 1916-17, and
	4·8300 „ „	for subsequent expenditure.
1937-38	3·3252 „ „	for expenditure to end of 1916-17 and
	4·7600 „ „	for subsequent expenditure.
1938-39	3·3252 „ „	for expenditure to end of 1916-17 and
	4·7000 „ „	for subsequent expenditure.

One effect of the change is that, in some cases, while the capital outlay on a railway at the end of 1907 was more than that at the end of 1906, the interest charge in connection therewith was less.

The gain or loss to the State shown in the statistical tables are administrative figures attributable to the year and differ from those appearing on pages 28 to 30 of Volume I of Railway Board's Report for 1938-39 which are the net results of receipts and payments actually adjusted during the year.

NOTE.—All contracts made by the Secretary of State in Council before the commencement of Part III of the Government of India Act, 1935, referred to in this publication will, as from the commencement of the said part of the Act, have effect as if they had been made on behalf of the Federation, *vide* Section 177 (1) (*b*) of the Act.

During the period intervening between the commencement of Part III of the Act and the establishment of the Federation, reference to the Federation shall be construed as a reference to the Governor General in Council, *vide* Section 313 (3) of the Act.

CLASS I RAILWAYS.
With gross earnings of Rs. 50 lakhs and over a year.

1. ASSAM-BENGAL RAILWAY SYSTEM.

Chairman.—G .H. Ormerod, Esq., M.Inst.C.E.
Managing Director.—R. L. Bliss, Esq., V.D.
Secretary.—W. H. J. Gore, Esqr.
Offices.—56, Victoria Street, London. S. W. 1.
Date of registration of the Company.—18th March 1892.

The construction of the Assam-Bengal railway as a State line was sanctioned in May 1891. The Assam-Bengal Railway Company was formed in England in April 1892 and took over the works commenced by the State. The late Noakhali (Bengal) railway, which was worked by the Assam-Bengal Railway Company up

1. ASSAM-BENGAL RAILWAY SYSTEM—*contd.*

to the end of 1905, was purchased by Government and amalgamated with the Assam-Bengal railway from the 1st January 1906.

Lines comprised in the system.—The Assam-Bengal railway system is made up of—

	Open line.	Under construction, or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Assam-Bengal railway (3′ 3⅜″ gauge)	1,131·71	..	1,131·71
(*b*) Chaparmukh-Silghat railway (3′ 3⅜″ gauge)	50·81	..	50·81
(*c*) Katakhal-Lalabazar railway (3′ 3⅜″ gauge)	23·49	..	23·49
(*d*) Mymensingh-Bhairab Bazar railway (3′ 3⅜″ gauge)	100·38	..	100·38
Total	1,306·39	..	1,306·39

Running Powers—

Home line over foreign lines :—

Tangi to Narayanganj, Eastern Bengal Railway, for passenger and goods trains .. .. 23·25 miles.

(a) Assam-Bengal railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand Total.	Remarks.
1	2	3	4	5	6
Main line—					
Chittagong to Feni	1-7-95	55·90			
Feni to Comilla	1-7-95	37·24			
Comilla to Akhaura	1-1-96	29·41			
Akhaura to Karimganj	4-12-96	114·00			
Karimganj to Badarpur	4-12-96	12·00			
Badarpur to Dámchara	23-4-99	*18·53			*Of this 3 miles between Katlichara and Dámchara were reconstructed in 1915.
Dámchara to Lumding	1-12-03	†100·29			
Lumding to Nazira	1-1-01	141·87			
Nazira to Lakwa	15-11-01	10·71			
Lakwa to Bhojo	1-2-03	12·72			†Of this, 7½ miles between Dámchara and Lumding were reconstructed in 1915-16 and 1916-17.
Bhojo to Tinsukia	1-3-03	41·53			
Branches—			574·20		
Noakhali branch—					
Láksám to Noakhali	15-5-03	30·46			
Chandpur branch—			30·46		
Láksám to Chandpur	1-7-95	31·62			
Tangi branch—			31·62		
Akhaura to Ashuganj on the left bank of the Megna	1-4-10	19·05			
Ashuganj to Bhairab Bazar	1-4-15	‡1·08			‡ Of this 0·28 miles are due to opening of King George VI Bridge on 6th December 1937.
Bhairab Bazar to Daulat Kandi	1-9-16	2·25			
Daulat Kandi to Tangi	1-7-14	39·07			
Sylhet branch—			61·45		
Kulaura to Fenchuganj Ghat	16-4-12	15·10			
Fenchuganj Ghat to Kusiyara	1-7-16	0·95			
Kusiyara to Sylhet	1-4-15	15·14			
Silchar branch—			31·19		
Badarpur to Katakhal	13-6-98	6·27			
Katakhal to Silchar	3-11-98	12·35			
Gauháti branch—			18·62		
Pandu to Gauháti	1-1-10	§4·76			§ Transferred from the Eastern Bengal railway (3′ 3⅜″) for working as an integral part of the Assam-Bengal railway from 1st April 1922.
Gauháti to Jamunamukh	1-1-97	74·11			
Jamunamukh to Lanka	2-1-99	19·11			
Lanka to Lumding (temporary station)	1-3-99	15·55			
Lumding (temporary station) to Lumding	20-2-00	3·44			
Dikhow extension—			116·91		
Simaluguri to Bihubar	4-2-13	6·46			
Naginimora extension—			6·46		
Bihubar to Naginimora	1-9-17	2·29			
Khowang branch—			2·29		
Simaluguri to Sepan	1-7-27	26·79			
Sepan to Khowang	10-11-27	12·00			
Furkating-Badulipara Jorhat Branch—			38·79		
Furkating to Bhalukmara	1-7-28	33·75			
Bhalukmara to Jorhat	1-8-28	8·53			
Karimganj-Longai Valley Branch—			42·28		
Karimganj to Kalkali Ghat	1-12-28	21·40			
Baraigram to Dullabchera	1-1-29	18·05			
Shaistaganj-Habiganj Branch—			39·45		
Shaistaganj to Habiganj	1-11-28	8·47			
Netrakona-Mohanganj Branch—			8·47		
Netrakona to Thakurakona	15-1-29	6·60			
Thakurakona to Mohanganj	1-4-29	10·95			
Chittagong-Nazirhat Branch—			17·55		
Chittagong to Hathhazari	1-12-29	14·23			
Hathhazari to Nazirhat	17-3-30	8·74			
Feni-Belonia Branch—			22·97		
Feni to Belonia	1-12-29	16·88			
Shaistaganj-Balla Branch—			16·88		
Shaistaganj to Balla	1-12-29	16·82			
Senchoa-Mairabari Branch—			16·82		
Senchoa to Juriagaon	1-3-30	15·33			
Juriagaon to Mairabari	20-4-30	14·92			
Sholashahar (Chittagong) Dohazari Branch—			30·25		
Sholashahar to Dohazari	10-6-31	25·05	25·05		
Total open mileage				1,131·71	

1. ASSAM-BENGAL RAILWAY SYSTEM—*contd.*

(a) Assam-Bengal railway (3′ 3¾″ gauge)—*contd.*

Details of construction—

Permanent-way.—The line is laid with about 326 miles of 60 lbs. R. B. S. F. F. Rail 85 miles of 80 lbs. I. M. R. F. F. second hand rails and the rest with 50 lbs. F. F. Steel rails partly on Sal, Pynkado, Nageshur. Jarrah and soft wood treated sleepers. The branch lines Sibsagar Khowang, Furkating Badulipara Jorhat, Feni-Belonia, Senchoa Mairabari, Shaistaganj Balla and Chittagong Nazirhat Railways are laid with 41¼ lbs. F. F. steel rails partly on Sal, Nahar Douglas Fir and Peapod pressed steel sleepers.

Ballast.—The ballast consists of broken brick, stone and laterite. The whole line has been ballasted.

Fencing.—The line is fenced between Chittagong Port and Silchar, Láksám and Chandpur, Akhaura and Ashuganj, and for 17½ miles between Gauháti and Lumding, one mile from Mariani station towards Tinsukia and at some stations on the hill section. Tangi branch is fenced.

Curves.—The sharpest permanent curve is of 382 feet radius.

Gradients.—The ruling gradient between Chittagong and Badarpur is 1 in 150; between Badarpur and Lumding, 1 in 60, with a 1 in 37 banking section, 9·89 miles long; between Pandu and Gauhati 1 in 100 and Gauhati to Tinsukia, 1 in 150 and Kulaura and Sylhet, 1 in 100; between Láksám and Noakhali, 1 in 200; between Láksám and Chandpur, 1 in 300; between Badarpur and Silchar, 1 in 150; between Akhaura and Tangi, 1 in 200; between Simaluguri and Khowang, 1 in 150; between Furkating and Badulipara 1 in 150; between Karimganj and Longai, Netrokona and Mohanganj, Chittagong and Nazirhat, Feni and Belonia, Shaistaganj and Habiganj, Shaistaganj and Balla 1 in 200 and between Senchoa and Mairabari 1 in 150.

Contracts—

Dated the 26th April 1892 (called the principal contract), *between the Secretary of State and the Assam Bengal Railway Company*, as to the construction, management, maintenance and working by the Company, of their undertaking.

Dated the 4th July 1895 (supplemental to the contract of 1892), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the raising of £500,000 by means of debentures.

Dated the 12th April 1897 (supplemental to the contract of 1892), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the raising of £300,000 by means of debentures.

Dated the 6th December 1899, *between the Secretary of State and the Assam-Bengal Railway Company*, as to the extension of time for the completion of the railway.

Dated the 4th November 1902, *between the Secretary of State and the Assam-Bengal Railway Company*, relating to the renewal of debentures issued by the Company.

Dated the 29th April 1903 (supplemental to the contract of 1892), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange. [Cancelled as from the 1st October 1921 under the contract of 19th November 1923.]

Dated the 11th April 1906 (supplemental to the contract of 1892), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the acquisition by the Company of the Noakhali (Bengal) railway for the purpose, and as a part, of their undertaking as from 1st January 1906.

Dated the 5th March 1914 (supplemental to the contract of 1892), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the adoption of the Government financial year for the purposes of accounts.

Dated the 3rd May 1922 (supplemental to the contract of 1892), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the transfer of the Pandu-Gauhati section of the Eastern Bengal railway for working as an integral part of the Company's undertaking from 1st April 1922.

Dated the 19th November 1923 (supplemental to the contracts of 1903, 1906, 1914 and 1922), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the compiling Accounts and statistics annually instead of half-yearly and as to rate of exchange.

Dated the 8th December 1927 (supplemental to the contracts of 1892, 1906, 1914, 1922 and 1923), *between the Secretary of State and the Assam-Bengal Railway Company*, as to the construction, maintenance and working of certain branch lines, *viz.*, Sibsagar Road, Khowang Railway, Furkating Badulipara-Jorhat Railway, Karimganj-Longai Valley Railway and Netrokona-Mohanganj Railway and any other new lines which shall be constructed as parts of the undertaking of the Company up to 31st day of December 1931.

Dated the 10th May 1929 (supplemental to the contracts of 1892, 1906, 1914, 1922 and 1923), *between the Secretary of State and the Assam Bengal Railway Company*, as to the adoption of uniform rate of 1*s.* 6*d.* per rupee as the rate of exchange.

Dated the 5th January 1937 (supplemental to the contracts of 1892, 1906, 1914, 1922, 1923 and 1929 *between the Secretary of State and the Assam-Bengal Railway Company*, as to the provision of buildings for the use of the Postal Departments and the rent, etc.

1. ASSAM-BENGAL RAILWAY SYSTEM—*contd.*

(a) Assam-Bengal railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—Government guarantee interest in sterling at 3 per cent. on the Company's share capital of £1,500,000. (Up to 30th June 1898 interest was allowed at 3½ per cent.)

(iii) *Distribution of profits.*—The net earnings to be applied in payment to the Government of—

(*a*) the equivalent in rupees of interest paid on debenture capital; provided that, if the Company's share capital is not less than $\frac{8}{11}$ths of the total capital expenditure, the rate of interest recovered under this sub-head (on debentures issued previous to 30th June 1898) shall not exceed the rate for the time being applicable to the Company's share capital. The last outstanding debenture was paid off on 4th July, 1936;

(*b*) the equivalent in rupees of the guaranteed interest paid to the Company in respect of share capital; and

(*c*) interest on the capital contributed, or deemed to be contributed, by the Government, at the same rate as the guarantee for the time being on the Company's capital. But if the capital advanced by Government exceed $\frac{8}{11}$ths of the total capital expenditure for the time being, the rate of interest on the amount of the excess to be subject to agreement.

"Surplus profits", after interest charges have been met, are divided between the Company and the Government in the ratio of the respective amounts of capital expended by them on the undertaking.

(iv) *Rates and fares.*—To be approved by the Government.

(v). *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—To be conveyed on the same general conditions as obtain on State railways of the same gauge, and at rates to be approved by the Government.

(*b*) Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates to be approved by the Government.

(vi) *Power of the Government to determine contract.*—The railway and its appurtenances are absolutely the property of the Government, who may determine the contract on the 31st December 1921, or at the end of any succeeding tenth year by giving 12 months' previous notice.

NOTE.—(1) The Secretary of State decided not to exercise his power to determine the contract on the 31st December 1921.

(2) The Secretary of State also decided not to exercise his power to determine the contract on the 31st December 1931.

The Government may also determine the contract at any time on six months' previous notice if the Company fail to fulfil its obligations, or if the line be worked at a loss for three consecutive half-years. On the determination of the contract, the Company is to hand over to the Government the railway and all its belongings of every description, on repayment by the Government of the amount in sterling, at the par value, of the share capital paid by the Company to the Government, who will also indemnify the company against any existing liabilities, including debentures incurred with the sanction of the Secretary of State.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi)].—Not specified.

(ix) Terms of construction and working of new Branch lines—supplemental contract dated 8th December 1927. The Secretary of State will supply the money for the construction of the Branches. When any branch or part thereof shall have been opened for traffic it shall be deemed to have become an integral part of "the undertaking" and of the "open system" as respectively defined in the principal contract of 1892. The capital expenditure shall be incorporated in the capital account of the undertaking and the amount thereof shall thereafter but not previously be deemed to be capital contributed by the Secretary of State. Interest during construction shall not be included in the capital expenditure but such interest shall be treated as capital cost for the purpose of the *pro-forma* account mentioned below. At the close of the nancial half year in which any branch lines or part thereof shall have been opened for public traffic and at the close of each subsequent financial half year a *pro-forma* account of the result of working such branch or part thereof shall be drawn up and the sum shown in such *pro-forma* account as the loss or gain on the half-year's working shall be added to the net earnings of the undertaking for the purpose of calculating the share of surplus profits due to the company under the terms of the principal contract.

NOTE.—The terms of the contract dated 8th December 1927 expired on the 31st December 1931 as per clause 9 of the said contract.

1. ASSAM-BENGAL RAILWAY SYSTEM—*contd.*

(a) Assam-Bengal railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

NOTE.—From the year 1936-37 the net earnings/working expenses have been arrived at after taking into account the 'Appropriation to Depreciation Reserve Fund' instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) line open, and (ii) line partly or wholly under construction.*	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Interest.	Surplus profits to the Company.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.		Rs.	Rs.		
1895 .	129·49	4,27,47,293	2,14,426	— 8,047	..	13,95,636		—14,03,683	64	103·75	*From 1899 to 1931-32 the figures in this column include Rs. 75,70,000 being interest charges during construction debited to capital. †The decrease in net earnings is due to heavy expenditure of an extraordinary character, *e.g.*, heavier renewals of sleepers, repairs to jetty sheds destroyed by fire in 1907, and commission on debentures renewed in 1908. ‡Decrease in the mileage is due to the exclusion of the hill section under reconstruction. §Including share of gross traffic earnings of Netrakona Mohanganj Railway paid to Mymensingh Bhairab Bazar Railway which is also included in the statistics of working of that Railway.
1896 .	285·90	5,59,03,217	6,18,785	33,238	0·06	23,73,034	..	—23,39,796	71	94·63	
1897 .	360·63	6,94,23,186	9,90,640	72,214	0·10	22,56,279	..	—21,84,065	63	92·71	
1898 .	379·25	8,32,11,758	13,08,124	54,551	0·07	24,45,275	..	—23,90,724	83	95·83	
1899 .	434·66	19,45,26,273	16,19,646	3,22,704	0·37	28,63,084	..	—25,40,380	75	80·08	
1900 .	436·26	10,31,71,809	17,09,955	3,64,364	0·38	33,31,390	..	—29,67,026	75	78·69	
1901 .	589·21	11,17,19,504	21,34,252	4,56,654	0·44	35,06,252	..	—30,49,598	70	78·60	
1902 .	589·21	11,87,04,959	20,96,058	2,54,418	0·23	38,08,387	..	—35,53,969	68	87·86	
1903 .	740·38	12,40,28,548	23,97,658	4,43,963	0·35	40,71,450	..	—36,27,487	71	81·48	
1904 .	740·38	12,60,09,639	29,53,962	1,05,390	0·08	41,66,535	..	—40,61,145	77	96·43	
1905 .	740·38	12,78,56,722	34,14,296	1,25,615	0·10	42,61,306	..	—41,35,691	88	96·32	
1906 .	775·28	13,25,20,704	42,20,964	4,27,858	0·30	44,53,682	..	—40,25,824	104	89·86	
1907 .	775·28	13,49,01,242	48,90,137	6,40,254	0·47	37,92,277	..	—31,52,023	122	86·91	
1908 .	775·28	13,90,59,050	46,96,729	†53,309	0·04	41,64,794	..	—41,11,485	117	98·87	
1909 .	770·84	14,31,45,488	49,14,893	4,47,461	0·31	43,64,911	..	—39,17,450	122	90·90	
1910 .	789·89	14,45,68,076	51,70,052	7,84,033	0·54	44,08,319	..	—36,24,286	126	84·83	
1911 .	789·89	14,79,47,899	55,76,145	11,37,710	0·77	45,86,405	..	—34,48,695	136	79·59	
1912 .	804·99	15,04,29,093	64,50,146	17,29,637	1·15	46,70,106	..	—29,40,469	155	73·18	
1st qr. of 1913.	804·99	15,18,32,951	18,08,616	5,96,938	0·39	11,75,440	..	— 5,78,502	173	66·99	
1913-14 .	811·73	15,70,22,687	70,42,793	22,71,129	1·45	49,09,954	..	—26,38,825	167	67·75	
1914-15 .	847·98	16,24,85,226	68,85,473	17,31,408	1·07	51,33,336	..	—34,01,928	156	74·85	
1915-16 .	‡807·92	16,49,71,183	67,47,378	14,90,502	0·90	52,48,999	..	—37,58,497	161	77·91	
1916-17 .	823·12	16,66,64,680	67,38,485	14,79,329	0·89	51,39,317	..	—36,59,988	157	78·04	
1917-18 .	869·41	16,89,41,111	73,66,661	18,22,922	1·08	54,65,160	..	—36,42,238	159	75·25	
1918-19 .	869·41	17,09,34,478	80,90,477	17,64,562	1·03	54,81,049	..	—37,16,487	179	78·19	
1919-20 .	869·41	17,61,01,439	1,03,12,318	19,15,168	1·09	58,76,815	..	—39,61,647	228	81·43	
1920-21 .	869·41	17,70,92,552	1,03,59,566	20,68,203	1·17	57,77,767	..	—37,09,464	229	80·03	
1921-22 .	869·41	17,93,79,949	83,18,203	1,33,175	0·07	66,24,385	..	—64,91,210	191	98·45	
1922-23 .	874·11	19,17,56,561	1,19,71,644	26,98,332	1·41	68,27,495	..	—41,28,663	263	77·46	
1923-24 .	874·11	19,40,67,069	1,29,62,420	39,12,038	2·02	69,33,056	..	—30,21,018	285	69·82	
1924-25 .	874·11	19,65,62,702	1,45,42,504	55,95,441	2·85	68,54,686	56,238	—13,15,483	320	61·52	
1925-26 .	874·11	20,01,58,410	1,65,12,356	74,22,732	3·71	70,34,619	1,70,210	+2,17,823	363	55·05	
1926-27 .	874·11	20,50,20,899	1,77,37,642	81,46,319	3·97	71,96,387	2,52,551	+6,97,381	390	54·07	
1927-28 .	912·90	21,47,54,023	2,04,78,750	97,74,973	4·55	76,06,476	4,01,994	+17,66,503	431	52·27	
1928-29 .	1,009·70	22,37,99,928	2,09,39,796	97,43,285	4·35	82,87,340	3,54,357	+11,01,588	399	53·47	
1929-30 .	1,092·65	23,33,08,026	2,05,29,123	71,15,845	3·05	85,88,254	97,884	—15,70,293	361	65·34	
1930-31 .	1,106·38	23,92,24,134	§1,96,41,709	§71,24,194	2·98	92,93,659	79,245	—22,48,710	340	63·73	
1931-32 .	1,131·43	24,26,93,659	§1,80,38,704	§63,09,103	2·60	95,49,595	5,281	—32,45,773	305	65·02	
1932-33 .	1,131·43	** 23,58,50,719	1,58,17,547	42,46,283	(*b*)1·80	96,05,949	1,855	—53,61,521	268	73·15	
1933-34 .	1,131·43	** 23,59,41,167	1,62,21,581	38,15,996	(*b*)1·62	94,51,038	..	—56,35,042	275	76·48	
1934-35 .	1,131·43	** 23,65,61,913	1,81,70,795	††49,38,074	(*b*)2·09	91,96,287	..	—42,58,213	308	72·82	
1935-36 .	1,131·43	**23,96,47,299	1,61,30,168	(a)25,73,161	1·07	91,62,729	..	—65,89,568	273	84·05	
1936-37 .	1,131·43	**23,86,92,997	1,69,65,212	18,53,108	0·78	91,72,248	..	—73,19,140	288	89·08	
1937-38 .	§§1,131.71	**24,15,32,406	1,76,08,650	19,77,769	0·82	93,01,361	..	—73,23,592	298	88·77	
1938-39 .	1,131·71	**24,48,42,706	1,91,36,752	31,92,334	1·30	93,85,129	..	—61,92,795	324	83·32	

(b) Chaparmukh-Silghat railway (3′ 3⅜″ gauge)—

Managing Agents.—MESSRS. MARTIN AND CO., CALCUTTA.

Date of registration of the Company.—1915.

Sanction to the construction of this line by the Assam-Bengal Railway Company, on behalf of the Chaparmukh-Silghat Railway Company was conveyed in Railway Board's Notification No. 276, dated the 5th October 1915.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Chaparmukh to Silghat	30-3-20	50·81	50·81

**Excludes Rs. 75,70,000 representing interest during construction to end of June 1898 charged to Revenue in Government Accounts and Rs. 42,19,257 from 1936-37 representing adjustment in respect of exchange on debentures discharged but for the purpose of division of surplus profits added to the Capital of the Secretary of State.

††Rebate Rs. 1,37,007 and earnings from cross traffic Rs. 4,204 paid to worked lines have been deducted.

(a) Rebate Rs.1,20,067 and earnings from cross traffic Rs. 5,067 paid to worked lines have been deducted.

(b) Revised figures.

§§ The difference of 0·28 between the figure as given in the History (1,131·71) and that given in Volume II (1,131·43) is due to the fact that the revised figure for Volume II was received after it was sent to Press.

1. ASSAM-BENGAL RAILWAY SYSTEM—*contd.*

(*b*) **Chaparmukh-Silghat railway** (3′ 3⅜″ gauge)—*contd.*

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. new and 50 lbs. second-hand rails laid on sâl and asna sleepers.

Ballast.—The line is ballasted from Chaparmukh to Nowgong only.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 1,432 feet.

Gradients.—The ruling gradient is 1 in 100.

Contracts—

Dated the 14th November 1918, *between the Secretary of State and the Chaparmukh-Silghat Railway Company.*

Dated the 7th October 1919, *between the Secretary of State and the Assam Bengal Railway Company.*

} As to the construction, maintenance, management and working of the Chaparmukh-Silghat Railway.

Main provisions of contracts—

(i) *Land.*—The land in British territory provided free of cost and the company allowed to have possession of the land so provided during the continuance of the contract.

(ii) *Government aid.*—The Government guarantee to pay such a sum, out of the revenue of the Assam-Bengal Railway, as will, together with the net receipts of this railway, make up an amount equal to interest at the rate of 3½ per cent. per annum on the paid-up share capital of the Company, and such a further sum, for the first 10 years, out of the revenue of the Assam Administration, as will raise that rate of interest to 4½ per cent. on such capital.

The Government also allow the company the sum of Rs. 6,000 per annum and such other actual expenses towards the office expenses and expenses of management and direction and also all such legal expenses as are incurred by the company with the approval of Government and debitable to revenue. But when the net receipts of the company in any year exceed 5 per cent. on the paid-up share capital, the excess is to be applied towards the reduction of this allowance.

(iii) *Terms of working.*—The line is managed, maintained, worked and supplied with rolling-stock by the Assam Bengal Railway for 50 per cent. of its gross earnings.

(iv) *Distribution of profits.*—When the net receipts of the company shall exceed the amount sufficient to pay interest at the rate of 5 per cent. per annum and office expenses and expenses of management and direction up to a sum of Rs. 6,000 and other actual expenses and legal expenses as aforesaid, one moiety of such excess shall belong to this railway and the other to the Assam-Bengal railway.

(v) *Rates and fares.*—The rates and fares for the carriage of goods and coaching traffic shall be such as may from time to time be sanctioned by the Secretary of State and the classification of goods be in conformity with that in force on the Assam-Bengal Railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores—

(*b*) Government bullion and coin, and the persons in charge thereof—

} All matters and things in connection with the management and maintenance of the railway and the conduct of traffic thereon, including police, telegraphs and telegraphic appliances or telephones shall in all respects, as far as practicable, be carried on in the same manner and subject to the same regulations and control by the Secretary of State as the same are carried on the Assam-Bengal Railway.

(vii) *Power of the Government to determine contract.*—The Government may, by giving 12 months previous notice, the 'notice of purchase', determine the contract, either on the 31st March 1948 or at the end of any subsequent period of 10 years, by giving to the Company a sum equal to 25 times the average yearly net earnings during the last preceding 3 years, provided that such sum shall not exceed by more than 20 per cent. nor be less than, the total capital expenditure of the Company.

The Government may also, by giving likewise the 'notice of special purchase', determine the contract when it is considered desirable that the gauge of the railway should be altered, or to convert it into a line of through communication, or to extend it, and the Company is unable to raise the capital necessary for the construction of the extension. In this case the Government undertakes to pay to the Company twenty-five times the average net earnings referred to above or 115 per cent. of the total capital expenditure of the Company, whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vii)].—Not specified.

1. ASSAM-BENGAL RAILWAY SYSTEM—*contd.*

(b) Chaparmukh-Silghat railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Amount of interest recoverable from the Assam-Bengal Railway and the Government of Assam.	Amount of surplus profits payable to the Assam-Bengal Railway.	Total income (columns 5+7—8).	Percentage of total income on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	
1919-20	50·81	26,76,939	*Nil*	The line was opened from the 30th March 1920 only.							
1920-21	50·81	28,94,896	1,31,299	65,649	2·27	43,428	..	1,09,077	3·77	50	50·00
1921-22	50·81	30,10,055	1,51,190	75,595	2·51	76,273	..	1,51,878	5·05	57	50·00
1922-23	50·81	30,53,641	2,18,709	1,09,354	3·58	41,819	..	1,51,173	4·95	83	50·00
1923-24	50·81	30,60,163	2,65,828	1,32,914	4·34	..	..	1,32,914	4·34	101	50·00
1924-25	50·81	30,62,372	3,21,369	1,60,684	5·25	..	..	1,60,684	5·25	112	50·00
1925-26	50·81	30,68,733	3,51,343	1,75,671	5·72	..	4,030	1,71,641	5·59	133	50·00
1926-27	50·81	30,78,914	3,77,401	1,88,700	6·13	..	10,021	1,78,679	5·80	143	50·00
1927-28	50·81	31,08,757	4,02,492	2,01,246	6·47	..	18,330	1,82,916	5·88	152	50·00
1928-29	50·81	32,51,170	4,11,951	2,05,976	6·34	..	22,064	1,83,912	5·66	156	50·00
1929-30	50·81	33,04,897	3,00,292	1,50,146	4·54	..	..	1,50,146	4·54	114	50·00
1930-31	50·81	33,83,401	2,51,183	1,25,592	3·71	..	..	1,25,592	3·71	95	50·00
1931-32	50·81	34,30,629	1,88,592	94,296	2·75	23,676	..	1,17,972	3·44	71	50·00
1932-33	50·81	34,40,006	1,77,693	88,846	2·58	31,110	..	1,19,956	3·49	67	50·00
1933-34	50·81	34,41,816	1,67,910	83,955	2·44	35,285	..	1,19,240	3·46	63	50·00
1934-35	50·81	35,25,090	1,71,852	85,926	2·44	32,907	..	1,18,833	3·37	65	50·00
1935-36	50·81	35,01,810	1,55,094	77,547	2·21	43,655	..	1,21,202	3·46	58	50·00
1936-37	50·81	35,01,593	1,64,792	82,396	2·35	38,760	..	1,21,156	3·46	62	50·00
1937-38	50·81	35,01,829	1,73,849	86,924	2·48	33,648	..	1,20,572	3·44	66	50·00
1938-39	50·81	35,01,829	1,71,689	85,845	2·45	34,589	..	1,20,434	3·44	65	50·00

(c) Katakhal-Lalabazar railway (3′ 3⅜″ gauge)—

Managing Agents.—MESSRS. MCLEOD AND CO., LTD., CALCUTTA.

Date of registration of the Company.—1915.

Sanction to the construction of this line by the Assam-Bengal Railway Company, on behalf of the Katakhal-Lalabazar Railway Company was conveyed in Railway Board's Notification No. 451-P., dated the 9th March 1916.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Katakhal to Lalabazar	1-4-23	23·49	23·49

Details of construction—

Permanent-way.—The permanent-way consists of 41½-lb. second-hand rail laid on the sâ sleepers with a small proportion of pynkado.

Ballast.—The line is ballasted.

Fencing.—The line is unfenced.

Curves. –The sharpest curve has a radius of 955 feet.

Gradients.—The ruling gradient is 1 in 150.

Contracts—

Dated the 19th day of May 1923, *between the Secretary of State and the Katakhal-Lalabazar Railway Co., Ltd.*, as to the construction, management and working of the Katakhal-Lalabazar Railway.

Dated the 16th day of October 1923, *between the Secretary of State and the Assam-Bengal Railway Co.*, for the working, maintenance and management of the Katakhal-Lalabazar Railway.

Main provisions of contracts—

(i) *Land.*—Provided by Government free of cost to the Company.

(ii) *Government aid.*—The Government guarantee interest at the rate of 3½ per cent. per annum on the paid-up share Capital of the Company, and the Assam Government guarantee for the first ten years an additional one per cent. on such Capital. The Government also allow the Company the sum of Rs. 3,500 per annum and such other actual expenses towards the office expenses and expenditure of management and direction and also all such legal expenses as are incurred

1. ASSAM-BENGAL RAILWAY SYSTEM—*contd.*

(c) Katakhal-Lalabazar railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*contd.*

by the Company with the approval of Government and debitable to Revenue. But when the net receipts of the Company in any year exceed 5 per cent. on the paid-up share Capital the excess is applied towards the reduction of this allowance.

(iii) *Terms of working.*—The line is worked and supplied with rolling stock by the Assam-Bengal Railway for 50 per cent. of its gross earnings.

(iv) *Distribution of profits.*—When the net receipts of the Company in any year shall exceed 5 per cent. on the paid-up share Capital and office expenses and expenses of management and direction up to a sum of Rs. 3,500 and other actual expenses and legal expenses one moiety of such excess shall belong to this Railway and the other to the Assam-Bengal Railway.

(v) *Rates and Fares.*—The rates and fares for the carriage of goods and coaching traffic shall be such as may from time to time be sanctioned by the Secretary of State and the classification of goods shall be in conformity with that in force on the Assam-Bengal Railway.

(vi) *Special obligations as to the conveyance of*—

(*a*) Mails, troops, police, etc.—

(*b*) Government bullion and coin and the persons in charge thereof— } *Nil.*

(vii) *Power of the Government to determine contract.*—The Government may by giving to the Company 12 months' previous notice which is to be called the 'notice of purchase' determine the contract either on the 31st day of March 1954 or on the 31st day of March in the last year of any subsequent period of 10 years by giving to the Company a sum equal to 25 times the average yearly net earnings during the last preceding 3 years provided that such sum shall not exceed by more than 20 per cent. or be less than, the total Capital expenditure of the Company.

The Government may also by giving likewise the 'notice of special purchase' determine the contract when it is considered desirable that the gauge of the Railway shall be altered or it is desired to convert the Railway into a line of through communication or when it is desirable that the line should be extended, and the Company is unable to raise the Capital necessary for the construction of the extension. In this case the Government shall pay to the Company 25 times the average net earnings referred to above or 115 per cent. of the total Capital expenditure of the Company, whichever may be greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract [if not determined under* (vii) *&* (viii).]—Not specified.

Statistics of working—

Year.	Mileage open at end of the year.	Total capital outlay, including suspense, to end of the year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Amount of interest recoverable from the Assam-Bengal Ry. and the Government of Assam.	Amount of surplus profits payable to the Assam-Bengal Ry.	Total income (cols. 5+7—8).	Percentage of total income on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	
1923-24	23·49	14,66,953	65,807	32,904	2·24	8,789	..	41,693	2·84	54	50·00
1924-25	23·49	15,99,166	90,968	45,484	2·84	24,705	..	70,189	4·38	74	50·00
1925-26	23·49	16,01,739	99,091	49,546	3·09	20,186	..	69,732	4·35	81	50·00
1926-27	23·49	15,99,900	1,07,541	53,770	3·36	15,583	..	69,353	4·33	88	50·00
1927-28	23·49	16,44,278	1,02,958	51,479	3·13	15,764	..	67,242	4·09	84	50·00
1928-29	23·49	17,03,563	98,957	49,478	2·90	21,285	..	70,763	4·15	81	50·00
1929-30	23·49	17,08,053	86,094	43,047	2·52	30,075	..	73,122	4·28	70	50·00
1930-31	23·49	17,11,866	82,655	41,327	2·41	22,962	..	64,289	3·76	67	50·00
1931-32	23·49	17,11,866	59,488	29,744	1·74	43,350	..	*73,094	4·27	48	50·00
1932-33	23·49	17,11,866	53,023	26,511	1·55	46,536	..	73,047	4·27	43	50·00
1933-34	23·49	17,12,616	51,389	25,695	1·50	42,331	..	68,026	3·97	42	50·00
1934-35	23·49	17,18,066	46,459	23,230	1·35	32,003	..	55,233	3·21	38	50·00
1935-36	23·49	17,19,404	46,208	23,104	1·34	27,423	..	50,527	2·94	38	50·00
1936-37	23·49	17,19,233	42,301	21,151	1·23	42,247	..	63,398	3·69	35	50·00
1937-38	23·49	17,19,147	48,542	24,271	1·41	33,261	..	57,532	3·35	40	50·00
1938-39	23·49	17,19,147	53,764	26,882	1·56	30,112	..	56,994	3·32	45	50·00

* This includes Rs. 3,251 for interest on loan not met by net earnings.

(d) Mymensingh-Bhairab Bazar Railway (3′ 3⅜″ gauge)—

Managing Agents.—MESSRS. GILLANDERS ARBUTHNOT & CO., CALCUTTA.

Date of registration of the Company.—1915.

Sanction to the construction of this line was conveyed in Railway Board's Notification No. 115, dated the 5th May 1915. The line was constructed by the Mymensingh-Bhairab Bazar Railway Company.

1. ASSAM-BENGAL RAILWAY SYSTEM—*contd.*

(*d*) Mymensingh Bhairab Bazar Railway (3′ 3⅜″ gauge)—*contd.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bhairab Bazar to Kishorganj	20-3-17	30·29	
Kishorganj to Gauripur-Mymensingh Junction	1-9-17	30·53	
Mymensingh *vid* Gauripur-Mymensingh and Shamgunj Junction to Netrakona . .	16-7-17	26·49	
Shamgunj to Jaria Jhanjail	1-5-18	13·07	
Total open mileage		..	100·38

Details of construction—

Permanent-way.—The permanent-way consists of 50-lb. steel rails, partly of Assam-Bengal railway type and partly of British standard section, laid on sâl sleepers.

Ballast.—The line is ballasted.

Fencing.—Only station yards, level crossings and selected portions of the line are fenced.

Curves.—The sharpest curve has a radius of 800 feet.

Gradients.—The ruling gradient is 1 in 200 on approaches to bridges with headways for navigation.

Contracts—

Dated the 7th day of November 1922, *between the Secretary of State and the Mymensingh-Bhairab Bazar Railway Company, Limited*, as to the construction, management and working of the Mymensingh-Bhairab Bazar Railway.

Dated the 14th May 1924, *between the Secretary of State, the Mymensingh Bhairab Bazar Railway Company, and the Assam-Bengal Railway Company*, for maintenance, management, use and working of the Mymensingh-Bhairab Bazar Railway.

Dated the 15th August 1932, *between the Secretary of State and the Mymensingh Bhairab Bazar Railway*, regarding the manner of apportionment of gross earnings derived from cross traffic from and to the Netrokona Mohanganj Railway passing over the Mymensingh Bhairab Bazar Railway.

Dated the 11th January 1933, *between the Secretary of State, the Mymensingh Bhairab Bazar Railway Company and the Assam Bengal Railway Company*, regarding the manner of apportionment of gross earnings derived from cross traffic from and to the Netrokona Mohanganj Railway passing over the Mymensingh Bhairab Bazar Railway.

Main provisions of contract—

(i) *Land.*—Provided by Government free of cost to the Company.

(ii) *Government aid.*—Out of a total paid up share capital of Rs. 86 lakhs, 63 lakhs is "guaranteed" capital and 23 "rebate" capital. The net receipts of the Branch Line Company are first divided in proportion to these two kinds of capital. When the portion of the net receipts attributable to guaranteed capital is not sufficient to pay interest at the rate of 3½ per cent. on such capital, the deficiency is made good by Government. Similarly when the portion of the net receipts due to rebate capital falls short of 5 per cent. interest, the balance is paid by way of rebate by the Assam-Bengal and Eastern Bengal Railways provided that the amount thus payable does not exceed such proportion of the net earnings derived from traffic interchanged by these Railways with the Branch Line Company as the rebate capital bears to the total paid-up share capital of the Branch Line Company.

(iii) *Terms of working.*—The line is managed, maintained and worked by the Assam-Bengal Railway. The amount payable to the latter Railway on this account is the ratio of the working expenses of the Assam-Bengal Railway including the Mymensingh-Bhairab Bazar Railway to their gross earnings or 50 per cent. of the gross earnings of the Mymensingh-Bhairab Bazar Railway whichever is less. Such charge shall include the provisions of all necessary rolling stock and machinery (other than fixed machinery).

(iv) *Distribution of profits.*—When the net receipts of the Company without the assistance of a rebate suffice to pay interest at a rate exceeding 5 per cent. per annum on the paid-up share capital, the surplus, after meeting the administration charges of the Company, shall be divided equally between the Company, and the working agency the share of the latter being further divisible between the working agency and the Secretary of State in such proportion as may be agreed upon in the event of the net earnings of the Assam-Bengal railway exceeding a sum sufficient to pay interest on the working agency's share capital in the Assam-Bengal railway undertaking.

Note.—The proportion of the moiety to be shared between the working Agency and the Secretary of State has been agreed at one-half (India Office letter No. F. 6569, dated the 24th November 1927).

1. ASSAM-BENGAL RAILWAY SYSTEM—*concld.*

(*d*) Mymensingh-Bhairab Bazar Railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of contract—*concld.*

(v) *Rates and fares.*—The rates and fares for the carriage of goods and coaching traffic shall be such as may from time to time be sanctioned by the Secretary of State and the classification of goods shall be in conformity with that in force on the Assam-Bengal Railway.

(vi) *Power of Government to determine contract.*—The Government may by giving 12 months' previous notice, the 'notice of purchase', determine the contract either on the 31st day of March 1948 or at the end of any subsequent period of 10 years by paying to the Company a sum equal to 25 times the average yearly net earnings for the last preceding 3 years, but the total amount so payable shall not in any case exceed by more than 20 per cent. the total capital expenditure of the Company or be less than such total capital expenditure.

The Government may also by giving likewise 'notice of special purchase' determine the contract when it is considered desirable that the gauge of the Railway shall be altered or that it should be extended, and the Company is unable to raise the capital necessary for the construction of the extension. In this case the Government shall pay to the Company 25 times the average net earnings referred to above or 115 per cent. of the total capital expenditure of the Company whichever may be the greater.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract [if not determined under* (vi)*].*—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay including suspense to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Amount recoverable on account of		Amount of surplus profits payable to Assam-Bengal Railway.	Total income (columns 5+7+8—9).	Percentage of total income on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
						Rebate from Assam-Bengal and Eastern Bengal Railways.	Guarantee of interest from Government.					
1	2	3	4	5	6	7	8	9	10	11	12	13
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		Rs.	
1917-18 .	87·93	99,22,584	3,10,466	1,55,233	1·56	..	..	..	1,55,233	1·56	88	50·00
1918-19 .	100·68	1,07,26,588	6,01,510	3,00,755	2·80	19,574	9,206	..	3,29,535	3·07	115	50·00
1919-20 .	100·68	1,08,07,000	9,48,453	4,74,227	4·39	451	..	..	4,74,678	4·39	181	50·00
1920-21 .	100·68	1,09,39,616	9,39,139	4,69,569	4·29	..	..	..	4,69,569	4·29	179	50·00
1921-22 .	100·68	1,12,95,594	7,74,756	3,87,378	3·43	15,283	..	..	4,02,661	3·56	148	50·00
1922-23 .	100·68	1,14,93,344	10,51,924	5,25,962	4·58	..	..	..	5,25,962	4·58	201	50·00
1923-24 .	100·68	1,15,85,369	11,90,210	5,95,105	5·14	..	..	11,070	5,84,035	5·04	227	50·00
1924-25 .	100·68	1,16,28,074	12,06,673	6,00,537	5·16	..	..	10,494	5,89,843	5·07	229	50·00
1925-26 .	100·68	1,17,04,633	11,76,791	5,88,396	5·02	..	..	2,725	5,85,671	5·00	225	50·00
1926-27 .	100·68	1,17,85,867	14,44,979	7,22,490	6·13	..	..	69,496	6,52,994	5·54	276	50·00
1927-28 .	100·68	1,18,68,391	15,68,918	7,84,459	6·61	..	..	97,526	6,86,933	5·79	300	50·00
1928-29 .	100·68	1,20,20,683	16,24,893	8,12,501	6·76	..	..	1,31,426	6,81,075	5·67	310	50·00
1929-30 .	100·68	1,20,72,915	13,04,006	6,53,968	5·42	..	..	51,372	6,02,596	4·99	249	50·00
1930-31 .	100·68	1,22,54,592	*10,73,204	*5,39,179	4·40	..	..	..	5,39,179	4·40	204	50·00
1931-32 .	100·68	1,22,63,180	*7,40,853	*3,71,537	3·03	42,969	23,196	..	4,37,702	3·57	141	50·00
1932-33 .	100·68	1,23,08,012	*8,75,093	*4,40,203	3·58	27,890	..	..	4,68,093	3·80	167	50·00
1933-34 .	100·68	1,23,13,392	*8,76,810	*4,41,573	3·59	25,919	..	..	4,67,492	3·80	167	50·00
1934-35 .	100·68	1,23,38,980	*8,23,111	*4,13,657	3·35	32,704	..	..	4,46,361	3·62	157	50·00
1935-36 .	100·68	1,23,84,819	†8,47,825	†4,26,446	3·44	21,396	..	..	4,47,842	3·62	161	50·00
1936-37 .	100·68	1,24,12,292	†9,30,941	†4,68,315	3·77	11,757	..	..	4,80,072	3·87	177	50·00
1937-38 .	(*a*)100·38	1,24,45,242	†8,90,210	†4,48,649	3·60	17,294	..	..	4,65,943	3·74	170	50·00
1938-39 .	100·38	1,24,49,750	†10,74,272	†5,40,740	4·34	..	..	2,047	5,38,693	4·33	205	50·00

* See remarks against section § on page 5.

†Includes Mymensingh-Bhairab Bazar Ry. Share of Netrakona Mohanganj Railway Cross Traffic.

(*a*) The difference of 0·56 between the figure as given in the History (100·38) and that given in Vol. II (99·82) is due to the fact that the revised figure for Vol. II was received after it was sent to Press.

B & N. W. RAILWAY SYSTEM.

REFERENCES.

B & N. W. Railway. ---------- 3'-3⅜"

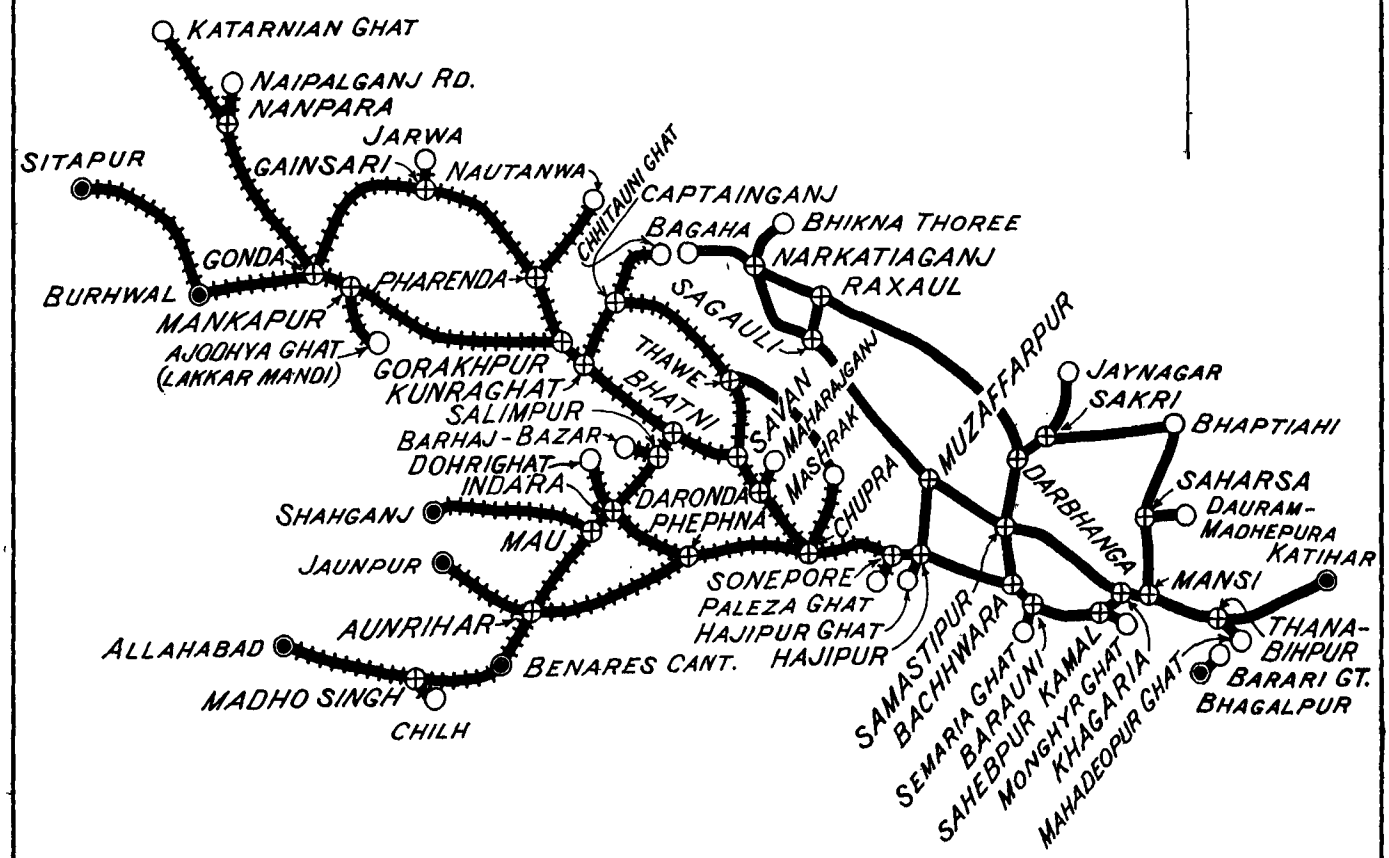
State lines. ----------

Home, Branch and Local line Junctions. ----------

Junctions connecting Foreign lines. ----------

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.



2. BENGAL AND NORTH-WESTERN RAILWAY SYSTEM.

Chairman.—Lt.-Col. T. GRACEY, R.E.

Managing Director.—SIR JAMES WILLIAMSON.

Offices.—237, Gresham House, Old Broad Street, London, E. C. 2.

Date of registration of the Company.—23rd October 1882.

Lines comprised in the system.—The Bengal and North-Western railway system is made up of—

	Open Line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Bengal and North-Western Railway (3′ 3⅜″ gauge)	1,267·20	..	1,267·20
(*b*) Tirhoot Railway (3′ 3⅜″ gauge)	810·56	..	810·56
(*c*) Mashrak Thawe extension (3′ 3⅜″ gauge)	39·32	..	39·32
Total	2,117·08	..	2,117·08

Running powers—

Home line over Foreign lines—

		Single line.	Sidings.	Mixed gauge.
		Miles.	Miles.	Miles.
Burhwal to Cawnpore	for passenger and goods trains.	61·82	8·51	15·83
Benares Cantonment to Benares City, and Benares Cantonment to outer signal on the Benares-Allahabad extension, East Indian railway (3′ 3⅜″ gauge)		2·18	3·51	..
At Sitapur within the boundary of the Rohilkund and Kumaon Railway		0·98	0·24	..
Total		64·98	12·26	15·83

(*a*) Bengal and North-Western Railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Sonepur *viâ* Chupra, Savan and Gorakhpur to Mankapur	15-1-85	220·47		
Mankapur to Gonda	2-4-84	17·36		
Gonda to Colonelganj	20-10-91	17·89		
Colonelganj to Jarwal Road	1-2-92	10·74		
Jarwal Road to Gogra Ghat	18-12-96	2·78		
Gogra Ghat to Chowka Ghat	24-12-98	3·67		
Chowka Ghat to Burhwal	24-11-96	2·88		
			275·79	
Branches and Extension—				
Digha Ghat branch—				
Sonepore to Palezaghat	15-1-85	9·80		
			9·80	
Mashrak branch—				
Chupra to Mashrak	20-3-10	26·17		
			26·17	
Maharajganj branch—				
Daronda to Maharajganj	1-4-07	3·90		
			3·90	
Savan-Captainganj branch—				
Savan to Thawe	1-4-07	17·82		
Thawe to Tamkuhi Road	15-3-13	22·60		
Tamkuhi Road to Captainganj	26-4-13	38·86		
			79·28	
Bagaha branch—				
Gorakhpur to Chhitauni Ghat	7-2-07	58·61		
			58·61	
Gorakhpur-Gonda Loop—				
Gorakhpur to Uska Bazar	15-12-86	39·66		
Uska Bazar to Barhni	15-1-05	30·88		
Barhni to Tulsipur	15-1-06	24·04		
Tulsipur to Balrampur	1-6-98	18·15		
Balrampur to Gonda	15-12-96	23·08		
			135·81	
Pharenda branch—				
Pharenda to Nautanwa	2-12-25	25·26		
			25·26	
Jarwa branch—				
Gainasari to Jarwa	12-4-06	9·16		
			9·16	
Ajodhya branch—				
Mankapur to Nawabganj (Gonda)	2-4-84	13·48		
Nawabganj (Gonda) to Lakarmandi Bridge	1-12-84	6·00		
			19·48	
Carried over	..	..	643·26	

2. BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

(*a*) Bengal and North-Western railway (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—concld. Brought forward	..	..	643·26	
Branches and Extension—concld.				
Naipalganj Road branch—				
Gonda to Bahraich	2-4-84	37·47		
Bahraich to Naipalganj Road	15-12-86	33·15		
			70·62	
Katarnian Ghat branch—				
Nanpara to Mihinpurwa	15-12-96	14·79		
Mihinpurwa to Katarnian Ghat	25-3-98	27·28		
			42·07	
Sitapur branch—				
Burhwal to Sitapur	13-3-11	58·91	58·91	
Chupra-Benares-Allahabad branch—				
Chupra to Revelganj	15-4-91	7·75		
Revelganj to Manjhi	1-4-99	1·34		
Manjhi to Bakulha	7-2-12	4·57		
Bakulha to Ballia	12-5-99	26·87		
Ballia to Phephna (Ganges-Gogra Doab lines.)	15-3-99	6·26		
Phephna to Ghazipur Ghat (Ganges-Gogra Doab lines.)	10-3-03	32·02		
Ghazipur Ghat to Aunrihar (Ganges-Gogra Doab lines.)	15-3-99	26·88		
Aunrihar to Benares (Ganges-Gogra Doab lines.)	15-3-99	19·87		
Benares to Madhosingh (Ganges-Gogra Doab lines.)	1-3-09	28·60		
Madhosingh to Jhusi (Ganges-Gogra Doab lines.)	21-4-09	41·95		
Jhusi to Izat bridge (Ganges-Gogra Doab lines.)	1-11-12	2·38		
Izat bridge to Allahabad City (Ganges-Gogra Doab lines.)	8-5-13	2·29		
			200·78	
Mirzapur Ghat extension—				
Madhosingh to Mirzapur Ghat (Ganges-Gogra Doab lines)	1-3-09	6·75		
Mirzapur Ghat to Chilh (Ganges-Gogra Doab lines)	25-10-12	1·05		
			7·80	
Bhatni-Benares chord—				
Bhatni to Turtipar	15-12-96	17·23		
Turtipar to Mau (Ganges-Gogra Doab lines)	8-6-98	26·00		
Mau to Aunrihar (Ganges-Gogra Doab lines)	15-3-99	35·81		
			79·04	
Barhaj branch—				
Salimpur to Barhaj	1-12-97	13·09		
			13·09	
Dohrighat branch—				
Phephna to Indara (Ganges-Gogra Doab lines)	15-3-99	31·39		
Indara to Dohrighat (Ganges-Gogra Doab lines)	21-3-04	21·92		
			53·31	
Shahganj branch—				
Mau to Azamgarh (Ganges-Gogra Doab lines)	8-6-98	26·83		
Azamgarh to Shahganj (Ganges-Gogra Doab lines)	14-2-03	34·95		
			61·78	
Jaunpur branch—				
Aunrihar to Jaunpur (Ganges-Gogra Doab lines)	21-3-04	36·54		
			36·54	
Total open mileage ..	..	..	1,267·20	

Details of construction—

Permanent-way.—The main line, the Sitapur and Gonda Nanpara Naipalganj branches and the section from Chupra to Inchcape Bridge and Bhatni to Turtipar, Indara to Phephna, also the Gorakhpur Bagaha branch, are laid with 50-lb. steel rails mostly on Sâl Sleepers. The rest of the line north of the Gogra is laid with 41¼-lb. steel rails mostly on Sâl Sleepers. The Ganges-Gogra Doab main lines from Turtipar to Allahabad City and Aunrihar Junction and Aunrihar to Inchcape bridge are laid with 50-lb. steel rails on Sâl Sleepers and the branches with 41¼-lb. steel rails on Sâl Sleepers.

Ballast.—The line is ballasted with kunkar, broken brick or shingle.

Fencing.—The main line and the section from Chupra to Revelganj are fenced.

Curves.—The sharpest curve is of 900 feet radius on the Gorakhpur division.

Gradient.—The ruling gradient is 1 in 300. On the various river ghat lines the gradients are steeper.

2. BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

(*a*) Bengal and North-Western railway (3′ 3⅜″ gauge)—*contd.*

Contracts—

Dated the 12th December 1882 (called the original contract), *between the Secretary of State and the Bengal and North-Western Railway Company*, as to the construction and working by the Company of the Bengal and North-Western Railway.

Dated the 22nd February 1886 (supplemental to and modifying in some respects the contract of 1882), *between the Secretary of State and the Bengal and North-Western Railway Company.*

Dated the 18th July 1890, *between the Secretary of State and the Bengal and North-Western Railway Company*, as to the taking over and working by the Company of the State railways known as the Tirhoot railway in conjunction with the Company's railway.

Dated the 19th December 1894 (supplemental to the contracts of 1882, 1886 and 1890), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for the further extension of the Company's system of railways and for the exercise by the Company of running powers for through traffic over the Cawnpore-Burhwal (3′ 3⅜″ gauge) link of the Oudh and Rohilkhand railway.

Dated the 12th December 1895 (supplemental to the contracts of 1890 and 1894), *between the Secretary of State and the Bengal and North-Western Railway Company*, modifying in some respects the contract of 1890 relating to the Tirhoot railway.

Dated the 23rd July 1896 (supplemental to the contracts of 1882, 1886, 1890, 1894 and 1895), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for further extensions of the Company's railway and of the Tirhoot railway.

Dated the 15th January 1903 (supplemental to the contracts of 1882, 1886, 1894 and 1896), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for further extensions of the Company's railway.

Dated the 24th April 1903 (supplemental to the contracts of 1882, 1890 and 1895), *between the Secretary of State and the Bengal and North-Western Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the " prescribed " rate of exchange. [Cancelled as from the 1st October 1921 under the contract of 31st March 1924.]

Dated the 14th December 1905 (supplemental to the contracts of 1882, 1890, 1895, 1896 and 1903), *between the Secretary of State and the Bengal and North-Western Railway Company*, continuing with modifications the contract of 1890 relating to the Tirhoot railway and modifying in some respects the contract of 1882 relating to the Company's railway.

Dated the 7th October 1907 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903 and 1905), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for further extensions of the Company's railway.

Dated the 1st October 1908 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903, 1905 and 1907), *between the Secretary of State and the Bengal and North-Western Railway Company*, for providing for a further extension of the Company's railway from Chupra to Mashrak.

Dated the 9th July 1909 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903, 1905, 1907 and 1908), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for a further extension of the Company's railway, from Burhwal to Sitapur.

Dated the 13th October 1910 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903, 1905, 1907, 1908 and 1909), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for extensions of the Company's railway connecting the Company's Main lines with the Company's Doab lines and with the Tirhoot railway, respectively, by bridges over the Gogra and Gundak rivers.

Dated the 7th December 1910 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903, 1905, 1907, 1908, 1909 and 13th October 1910), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for a further extension of the Company's railway from Thawe to Captainganj.

Dated the 13th March 1914 (supplemental to the contracts of 1882, 1886, 1890, 1894, 1895, 1896, 15th January and 24th April 1903, 1905, 1907, 1908, 1909, 13th October and 7th December 1910), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing for the accounts for purposes of these contracts being prepared from 1st April 1913 for the financial year instead of for the calendar year.

Bengal and North-Western Railway Company's Act of 1914, authorising the formation of a " Capital Redemption Fund " out of the general revenues of the Company; the sums at credit of this fund to be utilised in purchasing and cancelling the Company's first or second preference stock.

Dated the 15th May 1919 (supplemental to the above contracts), *between the Secretary of State and the Bengal and North-Western Railway Company*, as to the provision of funds for further capital expenditure on the Company's railway and the Tirhoot railway.

2. BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

(*a*) Bengal and North-Western railway (3′ 3⅜″ gauge)—*contd.*

Contracts—*concld.*

Dated the 31st March 1924 (supplemental to the contracts quoted above), *between the Secretary of State and the Bengal and North-Wester Railway Company*, as to rate of exchange and a further extension of Company's railway from Pharenda to Nautanwa and as to repayment of part of the Company's capital expenditure on the termination of the Company's contracts.

Dated the 23rd June 1925 (supplemental to the contracts quoted above), *between the Secretary of State and the Bengal and North-Western Railway Company*, as to the issue of special stock to the amount of £1,250,000 in the form of Debenture stock to meet further capital expenditure on the Company's Railway and the Tirhoot railway.

Dated the 9th March 1928 (supplemental to the contracts quoted above), *between the Secretary of State and the Bengal and North-Western Railway Company*, regarding the construction and working by the Company of further extension to the Tirhoot railway and the Company's Railways during the period 9th March 1928 to 31st December 1932.

Dated the 19th June 1929 (Supplemental to the contracts quoted above), *between the Secretary of State and the Bengal and North-Western Railway Company*, regarding rate of exchange.

Dated the 8th December 1932 (supplemental to the contracts quoted above), *between the Secretary of State and the Bengal and North-Western Railway Company*, providing terms for the extension of contracts until the end of the year 1937 or 1942.

Dated the 16th March 1933 (supplemental to the contracts quoted above), *between the Secretary of State and the Bengal and North-Western Railway Company*, as to the issue of special stock to the further amount of £1,250,000 in the form of Debenture stock to meet further capital expenditure on the company's railway and the Tirhut Railway or to any additional state works.

Dated the 5th June 1936 (supplemental to the contract of 1890 and to all contracts expressed to be supplemental to the said contract and in particular to the contract dated the 14th December 1905), *between the Secretary of State and the B. and N. W. Railway Company*, as to division of the residue of Net revenue on the termination of the contract of 1890.

Dated the 15th January 1937, *between the Secretary of State and the B. and N. W. Railway Company*, as to fixing amount of rent payable by the Postal Department of the Government of India.

Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost for the Company's railway; and at the cost of capital for the Tirhoot railway undertaking.

(ii) *Government aid.*—Nil.

(iii) *Terms of working.*—The Company's railway and the Tirhoot railway as well as extensions thereof constructed between 9th March 1928 and the 31st December 1937 or 1942 as the case may be are worked conjointly; but the accounts of the Company's railway and the Tirhoot railway as also of each of the aforesaid extensions are kept separate and distinct, except those relating to working expenses, other than maintenance, abstract A.

In addition to the ordinary working expenses and usual contributions to the Provident Institution the working expenses for each half-year include interest at 4 per cent. per annum on all outlay up to the 31st December 1904 expended on " rolling stock ", " steamers and barges and landing stages ", " stores ", and " stations and offices, station machinery, staff quarters and all other works including permanent-way at Sonepore " for joint use, and on all outlay subsequent to that date up to the close of each half-year incurred on the same matters and on " workshops and store buildings, etc. " or any other works used for joint purposes. The interest so charged is to be credited to the respective revenue accounts of the Company's railway and the Tirhoot railway undertaking in the ratio of the contributions of capital made to the joint accounts by each.

The working expenses of the open system, exclusive of the charges for maintenance of way, works and stations, other than those for general supervision, are divided between the Company's railway and the Tirhoot railway undertaking in proportion to their respective gross earnings.

The charges for maintenance of way, works and stations, other than the charges for general supervision, are appropriated and allotted to the Company's railway or the undertaking on the basis of the actual expenditure incurred by each.

The working expenses of each extension constructed between 9th March 1928 and 31st December 1937 or 1942 as the case may be are calculated half-yearly and are a sum which bears to the gross earnings during the half-year of the extension the same ratio as the combined working expenses and maintenance charges for the half-year of the Company's railway and the Tirhoot railway including all such extensions bear to the combined gross earnings for the half-year of the same railways and extensions.

2. BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

(*a*) Bengal and North-Western railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*contd.*

(iv) *Distribution of profits.*—As to the Company's railway, under the original contract of 1882 any surplus over 6 per cent. was to be equally divided between the Government and the Company; but this provision was rescinded by the contract of the 22nd February 1886, which leaves the profits entirely in the hands of the Company.

As to the open system, after deducting half-yearly from the gross earnings of the Company's railway, of the Tirhoot railway and of any extensions constructed between 9th March 1928 and 31st December 1937 or 1942 as the case may be the working expenses noted under (iii), the balance of the gross earnings (termed net revenue) in the case of the Company's line belongs to the Company, in the case of the aforesaid extensions to the Secretary of State and in the case of the Tirhoot railway undertaking is applied in the following manner and order :—

(*a*) in payment to the Company of interest accruing in each half-year, after the expiration of the period during which interest is chargeable to capital, at 4 per cent. per annum on one-half of the capital raised and expended by the Company for the purposes of the railway crossing the Gundak river by a bridge, from Bagaha to Chhitauni, including interest paid out of capital during construction ;

Note.—The Secretary of State has agreed that interest at 5½ per cent. per annum on one-half of additional capital required in connection with the Bagaha Bridge will be charged to the net revenue of the undertaking and credited to company in lieu of the 4 per cent. (India Office letter No. P. W. 3726-24, dated the 11th December 1924).

(*b*) in payment of interest at 5 per cent. per annum on state share of special stock raised by the company to meet further capital expenditure on Tirhoot railway and any additional state works;

(c) in payment to the Government from the aggregate net revenue for the entire year of interest accruing in such year at 5 per cent. per annum on all money advanced or expended by the Government for the purposes of the open lines of the undertaking which have not been repaid to the Government;

Note.—Advances made by the Secretary of State after 31st March 1921 for capital expenditure on the Tirhoot State Railway are subject to interest at rate to be agreed between the Secretary of State and the Company.

(*d*) the residue if not in excess of 10 lakhs going to Government and the Company in the proportion of $\frac{9}{10}$ths to the former and $\frac{1}{10}$th to the latter; if in excess of 10 lakhs, then as to 10 lakhs in the aforesaid proportion, and as to the balance in the proportion, of $\frac{29}{30}$ths to the Government and $\frac{1}{30}$th to the Company.

(*e*) On the termination by purchase of the Company's railway or otherwise of the Contract of 1890 the residue of net revenue for the broken period of less than one year ending with the date of such termination shall be divided as under :—

If such residue does not exceed the sum (hereinafter called the said sum) which bears to Rs. 10 lakhs the same proportion as is borne by the broken period to the financial year of the Government of India of which it forms part then in the proportion of 9/10ths to the Secretary of State and 1/10th to the Company and if the residue of net revenue exceeds the said sum then as to an amount equal to the said sum in the proportion of 9/10ths to the Secretary of State and 1/10th to the Company and as to the amount by which the residue of net revenue exceeds the said sum in the proportion of 29/30ths to the Secretary of State and 1/30th to the Company.

The difference between the net revenue of the Company's railway belonging and payable to the Company and the aggregate advances made to the Company, in any half-year, is to be adjusted as soon as known by payments in India between the Government and the Company as the case may require.

(v) *Rates and fares.*—As to the Company's line—to be approved by the Government, who may require the charge for salt, coal and foodgrains for full-wagon loads carried not less than 100 miles to be reduced to any rate not below $\frac{1}{5}$th pie per maund per mile and for passengers not below 2 pies per mile.

As to the open system—for the carriage of through passengers and goods over the Company's railway of all through and local passengers and goods over the Tirhoot railway undertaking, and of all passengers and goods from and to the undertaking or any connected railway carried over the Company's railway or any foreign railway connected therewith, the Government have the power to fix and vary the classification for passengers and goods, and the maxima and minima fares and rates for the several classes of passengers and goods, respectively.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails and post office servants on duty.—To be carried free on the Company's railway; and on the Tirhoot railway on the same general conditions and at the same rates as may be in force on the 3′ 3⅜″ gauge State railways.

2. BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

(a) Bengal and North-Western railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*contd.*

(*b*) Troops, police, high Government officials and Government stores.—As to the Company's railway, to be conveyed on the same general conditions as those in force on the 3′ 3⅜″ gauge State railways, and at rates to be approved by the Government. As to the Tirhoot railway undertaking, to be conveyed on the same general conditions and at the same rates as may be in force on State railways of the 3′ 3⅜″ gauge.

(*c*) Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates approved from time to time by the Secretary of State.

(vii) *Power of the Government to determine the contracts relating to the Company's railway.*—The line and all its appurtenances become the property of Government on the termination of the contracts. If the contracts terminate by the efflux of time the Government is to pay to the Company the value of rolling-stock, movable machinery, stores, etc., delivered to the Secretary of State less the amount expended subsequent to 31st December 1912 on the same items out of special stock which forms a liability of the Secretary of State, on the Company paying to the Secretary of State any balance from the proceeds of the special stock which is unexpended on the termination of the contract, less the amount expended from the sum of £433,333. fixed as non-returnable expenditure to be provided by the Company from its own resources and to be expended from 1st January 1913 to 31st December 1937 or 1942 as the case may be. The Government will also refund to the Company all Capital expenditure incurred by it subsequent to 31st December 1912, in excess of the sum of £433,333, if such expenditure shall not have been met out of the proceeds of the special stock, provided that, so much of the expenditure as represents expenditure on Rolling Stock, moveable machinery, plants, boats and stores belonging to the Company shall be deducted from the sum payable by the Government to the Company as detailed above. The Government may determine the contract on 31st December 1937 or 31st December 1942 as the case may be on giving to the Company 12 Calender months' previous notice in writing. If this option is exercised in either of the years 1937 and 1942 the price payable is to be

(*a*) The equivalent in sterling of the sum of Rs. 10,17,08,000 *plus* Rs. 4,175 in respect of adjustment of Railway Police charges for 1907-1912 calculated at 1*s*. 6*d*. to the rupee, it being understood that no variation in this rate shall be admissible.

(*b*) The actual sterling capital expended by the Company with the Secretary of State's sanction on the Doab lines (subject to the provisions of the contracts contained in the said Deeds of the 15th May 1919 and the 31st March 1924).

(*c*) The sterling capital advanced by the Company for expenditure on the Company's railway other than the Doab lines in excess of the sum of £433,333 between the end of the year 1912 and the end of the year 1937 or 1942 as the case may be so far as such expenditure has not been met out of issues of the special stock referred to in the contract contained in said Deed of the 15th May 1919 and subject to the provisions of that contract. One-half of the capital raised and expended by the Company for the Manjhi Ghat-Bakulha section, including interest paid out of capital during construction, is to be treated as capital attributable to the Doab lines ; the other half, and the whole of the capital for the Bagaha-Chhitauni section, including interest paid out of capital during construction, is to be treated as capital attributable to the Company's main lines. The Government may also determine the contract at any time, at six months' notice, if the Company fail to observe its obligations, on paying the value of rolling-stock, stores, etc., and fair value of the line, less the value of the same treated as a reversionary sum absolutely payable on the 31st December 1981 and the amount of any expenditure which shall have been provided for out of special stock.

(viii) *Power of the Government to determine the contracts relating to the Tirhoot railway undertaking.*—If the original contract with the Company, dated the 12th December 1882, terminate for any reason prior to the expiry of the term of the contracts relating to the Tirhoot railway undertaking, then the latter also, *ipso facto*, terminate at the same time. The Government may also terminate the Tirhoot railway contracts at any time, on six months' notice, if the Company fail to observe its obligations, otherwise the Tirhoot railway contracts shall continue in force until the 31st December 1937 or 1942 as the case may be. But if the option shall not be exercised in either of the years 1937 or 1942, the Company shall have no power to continue the working of the Tirhut State Railway after the end of the year 1942 unless a further agreement in relation thereto is come to by the parties. On the determination of the Tirhoot railway contracts the Government will resume possession of the undertaking, and any capital sums which may have been raised by the Government and expended on the Company's lines, or raised and expended by the Company on the undertaking, are to be considered as debts due from the Company and the Government respectively.

(ix) *Power of Government to determine the contract relating to the extensions constructed between the 9th March 1928 and 31st December 1937 or 1942 as the case may be.*—Government may determine the contract relating to any or all of these extensions on the 31st day of December 1937 or 1942 as the case may be by giving to the Company at least six calendar months' notice

2. BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

(*a*) Bengal and North-Western railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of contracts—*contd.*

in writing expiring on such day irrespective of whether the principal indentures are determined at the same time or not. The Government may also determine the contract at any time on six months' notice if the Company fail to observe its obligations.

(x) *Powers of the Company to surrender contract.*—*Nil*, except as regards the contract of 1928 which can be surrendered by the Company by giving six months' notice to the Secretary of State in the manner and under conditions in which Government is empowered to determine the contract, *vide* clause (ix) above.

(xi) *Term of contracts relating to the Company's railway.*—99 years, *i.e.*, until the 31st December 1981 subject to (vii).

(xii) *Term of contracts relating to the Tirhoot Railway undertaking.*—33 or 38 years as the case may be, i.e., from 1st January 1905 to the 31st December 1937, or 1942, subject to (viii).

(xiii) *Rental payable by the Postal Department.*—If the Secretary of State so requires, the company shall forthwith provide suitable buildings for the Postal Department on terms and conditions prevailing on State Railways and the Postal Department shall pay for such buildings a yearly rental at a rate calculated on the capital cost thereof including cost of land as is in force on State Railways worked by the State.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Interest divided between the Government and the company in the ratio of gross earnings.	Payments received for working the Tirhoot railway.	Total income.	Percentage of total income on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	
1884 . .	75·00	1,52,47,428	77,670	—26,221	..	..	—26,221	..	29	133·76
1885 . .	303·00	2,01,86,980	12,05,541	5,89,206	..	..	5,89,206	2·92	72	51·13
1886 . .	376·00	2,32,16,102	18,54,074	8,09,189	..	..	8,09,189	3·49	106	56·48
1887 .	376·00	2,56,22,684	19,44,002	8,37,004	..	..	8,37,004	3·27	90	56·36
1888 . .	376·00	2,61,51,593	22,09,543	9,88,844	..	..	9,88,844	3·78	102	55·94
1889 . .	376·00	2,63,41,872	22,11,824	10,53,964	..	..	10,53,964	4·00	103	52·25
1890 . .	376·00	2,68,84,918	22,08,788	12,21,020	..	*24,245	12,45,265	4·63	101	44·73
1891 . .	401·00	2,76,68,842	24,76,909	15,48,590	..	69,484	16,18,074	5·85	111	37·48
1892 . .	414·50	2,83,88,821	29,39,077	16,20,567	..	67,060	16,87,627	5·94	125	44·86
1893 . .	414·50	2,84,84,234	26,14,546	15,75,636	..	66,842	16,42,478	5·79	114	39·74
1894 . .	414·50	2,87,24,887	26,17,242	16,87,899	..	72,358	17,60,257	6·13	115	35·51
1895 . .	414·50	3,12,95,704	25,71,036	16,82,766	..	72,909	17,55,675	5·61	112	34·55
1896 . .	478·63	3,43,36,114	26,26,033	16,70,172	..	71,614	17,41,786	5·07	113	36·40
1897 . .	485·55	4,10,32,207	27,55,718	17,24,277	..	74,905	17,99,182	4·38	105	37·43
1898 . .	586·25	4,66,78,822	33,31,890	19,74,920	..	75,885	20,50,805	4·39	112	40·73
1899 . .	743·00	5,16,06,763	43,44,861	26,70,911	..	61,940	27,32,851	5·30	113	38·53
1900 . .	743·00	5,24,73,019	43,64,006	24,79,433	..	49,563	25,28,996	4·83	109	43·18
1901 . .	743·00	5,50,91,830	53,66,794	30,97,372	..	76,853	31,74,225	5·76	134	42·22
1902 . .	747·75	5,84,82,525	55,60,238	29,72,183	..	76,671	30,48,854	5·92	139	46·55
1903 . .	812·96	6,21,09,547	61,98,433	38,53,972	..	1,04,369	39,58,341	6·37	145	37·82
1904 . .	870·80	6,43,92,183	67,16,933	43,28,496	..	1,16,834	44,45,330	6·90	147	35·56
1905 . .	901·32	6,77,55,566	61,79,116	34,34,390	+37,627	1,69,446	36,41,463	5·37	117	43·81
1906 . .	932·18	7,13,66,623	77,02,976	40,92,699	—9,028	2,01,060	42,84,731	6·00	142	46·99
1907 . .	1,014·90	7,50,01,758	89,59,804	49,72,741	—25,044	2,04,275	51,51,972	6·87	154	44·78
1908 . .	1,016·73	7,91,13,230	79,80,293	43,74,935	+45,015	1,58,939	45,78,889	5·79	162	44·78
1909 . .	1,091·56	8,44,52,801	80,65,653	43,59,479	+31,817	58,411	44,49,707	5·27	142	45·95
1910 . .	1,117·14	8,92,16,995	84,58,223	48,85,946	+58,810	2,01,276	51,46,032	5·77	146	42·23
1911 . .	1,175·84	9,31,80,852	99,29,872	57,59,938	+41,140	2,35,109	60,36,187	6·48	162	42·01
1912 . .	1,177·27	9,68,70,261	1,12,49,175	73,19,499	+38,037	3,09,961	76,67,497	7·91	184	34·93
1st qr. of 1913	1,200·00	9,81,20,363	29,13,331	18,67,611	+21,676	1,37,495	20,26,782	2·07	187	35·86
1913-14	1,240·12	9,89,54,245	1,06,80,308	63,85,474	+1,19,400	2,96,483	68,01,357	6·87	166	40·21
1914-15 .	1,238·67	9,91,40,377	1,08,71,200	65,71,263	+68,754	2,53,006	68,93,023	6·95	169	39·55
1915-16 .	1,240·92	9,90,50,532	1,02,15,346	60,55,164	+85,587	2,34,486	63,75,237	6·44	158	40·72
1916-17 .	1,241·67	9,88,81,177	1,18,37,675	69,00,456	+60,586	2,69,183	72,30,225	7·31	183	41·71
1917-18 .	1,241·65	9,78,24,472	1,21,80,346	67,21,392	+40,938	2,19,361	69,72,691	7·13	189	44·89
1918-19 .	1,243·49	9,63,09,535	1,49,25,309	86,48,237	+26,253	3,13,336	89,87,826	9·33	230	42·06
1919-20 .	1,248·58	9,61,20,832	1,42,74,500	81,92,474	+12,991	2,56,514	84,61,979	8·80	220	42·61
1920-21 .	1,248·33	9,81,69,381	1,45,49,255	77,83,581	+43,097	2,47,667	80,74,345	8·22	224	46·50
1921-22 .	1,247·96	9,88,15,169	1,67,04,612	93,66,964	+63,077	3,19,676	97,49,717	9·87	257	43·93
1922-23	1,247·83	10,24,65,923	1,81,03,003	1,01,31,279	+52,777	3,72,539	1,05,56,595	10·30	278	44·04
1923-24 .	1,249·34	10,57,00,909	1,77,25,761	98,01,682	+40,800	3,49,870	1,01,92,352	9·64	273	44·70
1924-25 .	1,250·94	10,79,72,697	1,85,76,503	1,03,38,850	+77,206	3,68,746	1,07,84,802	9·99	286	44·34
1925-26 .	1,275·15	11,11,42,506	1,85,46,233	1,09,11,900	+1,43,295	4,68,347	1,15,23,542	10·37	280	41·16
1926-27 .	1,269·84	11,21,55,400	1,93,44,485	1,18,65,113	+1,39,935	..	1,20,05,048	10·70	293	38·66
1927-28 .	1,269·51	11,31,64,601	2,06,09,069	1,29,06,541	+1,23,643	5,25,848	1,35,56,032	10·98	312	37·37
1928-29 .	1,268·86	11,37,73,403	1,89,58,909	1,09,15,270	+1,43,624	5,24,316	1,15,83,210	10·18	287	42·43
1929-30 .	1,270·32	11,46,86,973	1,93,47,300	1,07,40,730	+51,015	5,12,361	1,13,34,106	9·88	293	44·48
1930-31 .	1,269·13	11,57,31,011	1,80,56,186	93,77,686	+39,570	4,70,379	98,87,635	8·54	274	48·06
1931-32 .	1,270·37	11,70,59,312	1,77,30,951	95,76,443	—2,611	3,21,139	98,94,971	1·45	268	45·99
1932-33 .	1,269·67	11,74,82,769	1,81,52,572	99,38,999	+23,530	2,94,002	1,02,56,531	8·73	275	45·25
1933-34 .	1,269·59	11,81,20,821	1,91,52,758	1,07,97,231	—22,305	3,13,019	1,10,87,945	9·39	290	43·62
1934-35 .	1,269·73	11,85,25,933	1,92,41,086	1,06,48,581	+18,435	1,68,304	1,08,35,320	9·14	291	44·66
1935-36 .	1,269·28	11,98,38,834	1,98,21,745	1,08,92,326	+27,863	1,56,792	1,10,76,981	9·24	300	45·05
1936-37	1,269·06	12,07,16,181	2,10,77,017	1,20,88,280	+43,609	1,35,906	1,22,67,795	10·15	319	42·65
1937-38 .	1,269·05	12,21,08,585	2,13,18,297	1,18,31,024	+66,376	2,07,032	1,21,04,432	9·91	323	44·50
1938-39 .	1,267·20	12,31,65,295	2,12,34,397	1,09,02,417	+55,583	2,00,746	1,11,58,746	9·06	322	48·66

* For the second-half of 1890 only as the line was taken over for working from the 1st July 1890.

2. BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

(*b*) Tirhoot railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5
Main line—				
Sonepore to Hajipur	1-8-87	3·23		
Hajipur to Bachhwara	1-4-00	44·32		
Bachhwara to Barauni Junction	1-5-83	10·05		
Barauni Junction to Thana Bihpur	1-3-00	66·17		
Thana Bihpur to Katareah	1-2-01	17·71		
Katareah to Kursela	10-7-02	3·75		
Kursela to Katihar Junction	7-3-01	24·36		
			169·59	
Branches and Extensions—				
Hajipur-Muzaffarpur branch—				
Hajipur to Muzaffarpur	26 10-84	32·97	32·97	
Semaria Ghat extensions—				
Barauni Junction to Semaria Ghat	1-5-83	7·96	7·96	
Bachhwara-Bagaha branch—				
Bachhwara to Dalsing Sarai	1-5-83	6·10		
Dalsing Sarai to Samastipur	1-11-75	14·75		
Samastipur to Muzaffarpur	24-2-77	31·50		
Muzaffarpur to Motihari	1-2-83	50·18		
Motihari to Bettiah	20-12-83	27·06		
Bettiah to Narkatiaganj	17-1-06	22·58		
Narkatiaganj to Bagaha	1-5-07	24·85		
Bagaha to Gundak bridge East bank	9-8-12	0·30		
			177·32	
Hajipur extension—				
Hajipur to Hajipur Ghat	26-10-84	1·89	1·89	
Raxaul branch—				
Sagauli to Raxaul	1-3-09	17·87	17·87	
Samastipur-Darbhanga-Narkatiaganj loop—				
Samastipur to Darbhanga	1-11-75	23·12		
Darbhanga to Sitamarhi	1-7-90	42·11		
Sitamarhi to Riga	1-1-91	5·75		
Riga to Dhang	1-7-91	7·00		
Dhang to Bairagnia	1-3-92	5·24		
Bairagnia to Narkatiaganj	20-12-07	59·09		
			142·31	
Bhikna-Thoree branch—				
Narkatiaganj to Bhikna Thoree	12-2-06	22·13	22·13	
Darbhanga-Bhaptiahi branch—				
Darbhanga to Jhanjharpur	1-2-83	23·66		
Jhanjharpur to Ghogardiha	8-4-86	13·68		
Ghogardiha to Nirmali	8-4-86	6·24		
Nirmali to Bhaptiahi	15-11-87	8·35		
			51·93	
Jaynagar branch—				
Sakri to Jaynagar	14-1-05	30·20	30·20	
Bhaptiahi-Mansi branch—				
Bhaptiahi to Simri Bakhtiarpur	1-3-07	43·78		
Simri Bakhtiarpur to Mansi	15-12-07	15·71		
			59·49	
Baijnathpur branch—				
Saharsa to Baijnathpur	15-3-08	4·55		
Baijnathpur to Dauram Madhepura	4-10-18	8·02		
			12·57	
Monghyr branch—				
Sahebpur Kamal to Monghyr Ghat	7-3-00	14·41	14·41	
Bhagalpur branch—				
Thana Bihpur to Mahadeopur Ghat	16-12-01	11·97		
Mahadeopur Ghat to Barari (Steamer service)	..	..		
Barari to Bhagalpur Kachery	15-3-06	3·50		
Bhagalpur Kachery to Bhagalpur station, E. I. Ry.	23-12-10	1·44		
Barari to Barari Ghat	1-12-18	0·21		
			17·12	
Samastipur-Rusera-Khagaria extension—				
Samastipur to Rusera Ghat	21-12-12	17·72		
Rusera Ghat to Hasanpur Road	7-5-15	10·81		
Hasanpur Road to Khagaria	1-11-15	24·27		
			52·80	
TOTAL OPEN MILEAGE	..	..	..	810·56
DOUBLE LINE—				
Barauni Junction to Bachhwara	22-9-06	10·05	10·05	

2. BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*contd.*

(*b*) Tirhoot railway (3′ 3⅜″ gauge)—*contd.*

Details of construction—

Permanent-way.—The main line from Hajipur to Katihar, and branches from Barauni Junction to Semaria Ghat (3·49 miles), Thana Bihpur to Mahadeopur Ghat, Khagaria to Hasanpur Road Bachhwara to Bettiah, Bettiah to Bagaha, Bagaha to Narkatiaganj, Narkatiaganj to Darbhanga. Muzaffarpur to Sonepur, Samastipur to Hasanpur Road, and Samastipur to Bairagnia, are laid with 50-lb. steel rails mostly on sâl sleepers The rest of the line is laid with 41¼-lb. steel rails.

Ballast.—The line, except the Bhikna-Thoree branch, is ballasted with kunkur or broken brick.

Fencing.—The line, except new branches, is fenced with stone posts and 4 wires.

Curves.—The sharpest curve, which is on the main line, is of 2,000 feet radius.

Gradients.—The ruling gradient of the line is 2 in 300, except on 3·42 miles between Samastipur and Pertabganj, where the gradient is 1 in 200 and on the Bhikna-Thoree branch where it is 1 in 80. On various river ghat lines the gradients are steeper.

Contracts—
Main provisions of contracts— As noted under Bengal and North-Western railway.

Statistics of working.—(Those for the periods prior to 1905 will be found in Appendix 38 to the Railway Administration Report for 1907).

NOTE.—From the year 1936-37 the net earnings/working expenses have been arrived at after taking into account the 'Appropriation to Depreciation Reserve Fund' instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Interest divided in the ratio of gross earnings.	Payment made to the Bengal and North-Western Railway Company for working the line.	Total income.	Percentage of total income on total capital outlay given in column 3.	Interest.	Gain to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1905 .	565·45	6,21,36,962	61,81,754	35,95,050	—37,627	1,69,446	33,87,977	5·45	23,54,563	10,33,414	190	42·45
1906 .	614·30	6,73,40,339	66,80,324	38,97,310	+9,028	2,01,060	37,05,278	5·50	23,17,307	13,87,971	189	41·52
1907 .	763·56	7,19,99,253	75,39,243	42,21,002	+25,044	2,04,275	40,41,771	5·61	23,80,668	16,61,103	192	43·68
1908 .	774·69	7,33,81,580	81,68,953	44,81,501	—45,015	1,58,939	42,77,547	5·83	24,68,465	18,09,082	204	45·14
1909 .	774·69	7,42,61,067	75,53,873	40,09,582	—31,817	58,411	39,19,354	5·28	24,73,136	14,46,218	188	46·92
1910 .	776·13	7,46,12,530	83,14,066	48,01,820	—58,810	2,01,276	41,41,734	6·09	24,92,047	20,49,687	206	42·24
1911 .	769·04	7,56,16,782	89,15,376	52,68,260	—41,140	2,35,109	49,92,011	6·60	25,53,319	24,38,692	223	40·91
1912 .	791·51	7,82,44,847	98,30,665	64,73,034	—38,037	3,09,961	61,25,036	7·83	26,48,419	34,76,617	239	34·15
1st qr. of 1913	791·51	7,86,99,931	26,02,230	16,91,800	—21,676	1,37,495	15,32,629	1·95	7,16,614	8,16,015	253	34·99
1913-14	788·16	8,07,86,397	1,02,64,997	64,76,739	—1,19,400	2,96,483	60,60,856	7·50	27,70,371	32,90,485	250	36·90
1914-15	788·45	8,17,15,012	95,03,765	58,14,830	—68,754	2,53,006	54,93,070	6·72	28,43,125	26,49,945	232	38·82
1915-16	825·62	8,13,00,448	93,11,906	56,14,514	—85,587	2,34,486	52,94,441	6·91	28,30,356	24,64,085	217	39·71
1916-17	812·06	8,06,18,533	98,92,880	61,54,482	—60,586	2,69,183	58,24,713	7·22	26,66,899	31,57,814	234	37·79
1917-18	804·00	8,01,19,133	93,07,091	53,46,681	—40,938	2,19,361	50,86,382	6·35	27,89,261	22,97,121	223	42·15
1918-19	818·96	7,98,35,468	1,08,42,111	67,48,406	—26,253	3,13,336	64,08,817	8·03	27,84,649	36,24,168	257	37·75
1919-20	815·24	8,10,81,021	1,10,58,285	60,31,263	—12,991	2,56,514	57,61,758	7·31	27,41,480	30,20,278	261	45·46
1920-21	814·94	8,20,77,000	1,11,78,680	59,15,532	—43,097	2,47,667	56,24,768	6·85	27,34,818	28,89,950	264	47·08
1921-22	814·02	8,32,66,909	1,23,24,909	67,98,023	—63,077	3,19,676	64,15,270	7·70	28,12,242	36,03,028	291	44·84
1922-23	811·37	8,52,78,159	1,45,63,790	79,06,281	—52,777	3,72,539	74,80,965	8·77	22,86,124	45,94,841	345	45·71
1923-24	813·03	8,74,73,739	1,38,60,356	76,21,063	—40,800	3,49,870	72,30,393	8·27	30,10,978	42,19,415	328	45·05
1924-25	814·85	8,86,17,734	1,49,72,031	79,88,403	—77,206	3,68,746	75,42,451	8·51	30,94,679	44,47,772	353	46·65
1925-26	807·88	8,88,60,847	1,63,04,952	95,91,210	—1,43,295	4,68,347	89,79,568	10·11	28,52,191	61,27,377	388	41·18
1926-27	809·26	8,89,85,919	1,71,10,676	1,04,96,225	—1,39,935	..	1,03,56,290	11·64	31,39,855	72,16,435	407	38·66
1927-28	807·10	9,12,70,828	1,68,64,974	1,04,69,037	—1,23,643	5,25,848	98,19,546	10·76	32,04,043	66,15,503	402	37·92
1928-29	810·26	9,25,96,007	1,73,08,030	1,04,53,790	—1,43,624	5,24,316	97,85,850	10·57	33,01,680	64,84,170	411	39·60
1929-30	806·40	9,45,08,403	1,69,42,632	98,05,199	—8,11,015	5,12,361	92,11,823	9·75	33,49,181	58,62,642	404	42·13
1930-31	805·86	9,55,76,599	1,44,16,844	75,91,550	—39,570	4,70,379	70,81,601	7·41	34,50,931	36,30,670	344	47·34
1931-32	802·78	9,68,44,204	1,37,09,246	72,92,990	+1,135	3,21,139	69,72,986	7·20	35,46,762	34,26,224	328	46·80
1932-33	802·54	9,66,94,472	1,46,67,572	81,72,634	—27,555	2,94,002	78,51,077	8·12	35,77,465	42,73,612	351	44·26
1933-34	804·08	9,64,34,750	1,41,13,525	78,42,573	+29,558	3,13,010	75,50,112	7·83	35,76,846	39,73,266	338	44·43
1934-35	803·51	9,73,63,640	1,52,76,538	81,18,121	—21,931	—1,68,304	79,27,886	8·14	36,01,495	43,26,391	366	46·86
1935-36	801·67	9,76,66,064	1,56,76,298	79,38,066	—31,393	—1,56,792	77,49,881	7·94	36,36,812	41,13,069	376	49·36
1936-37	799·52	9,77,50,535	1,66,64,681	80,07,022	—47,347	—1,35,906	78,23,769	8·00	36,50,999	41,72,770	401	51·95
1937-38	812·38	9,86,08,411	1,69,52,036	81,74,791	—68,192	—2,07,032	78,99,567	8·01	36,74,833	42,24,734	401	51·78
1938-39	810·56	10,01,22,014	1,66,88,670	79,60,510	—57,079	—2,00,746	77,02,685	7·69	37,31,485	39,71,200	396	52·30

(*c*) Mashrak Thawe Extension (3′ 3⅜″).

Progress of opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Mashrak to Thawe	12-1-31	39·32	39·32	39·32	

2. BENGAL AND NORTH-WESTERN RAILWAY SYSTEM—*concld.*

(*c*) Mashrak Thawe Extension (3′ 3⅜″ gauge)—*contd.*

Details of construction.

Permanent-way.—A line from Mashrak to Thawe, 39·32 miles in length was opened on 12th January 1931. The line is laid with 41¼ lb. steel rails on sal sleepers.

Ballast.—The line is ballasted with broken brick and shingle.

Fencing.—The line is unfenced.

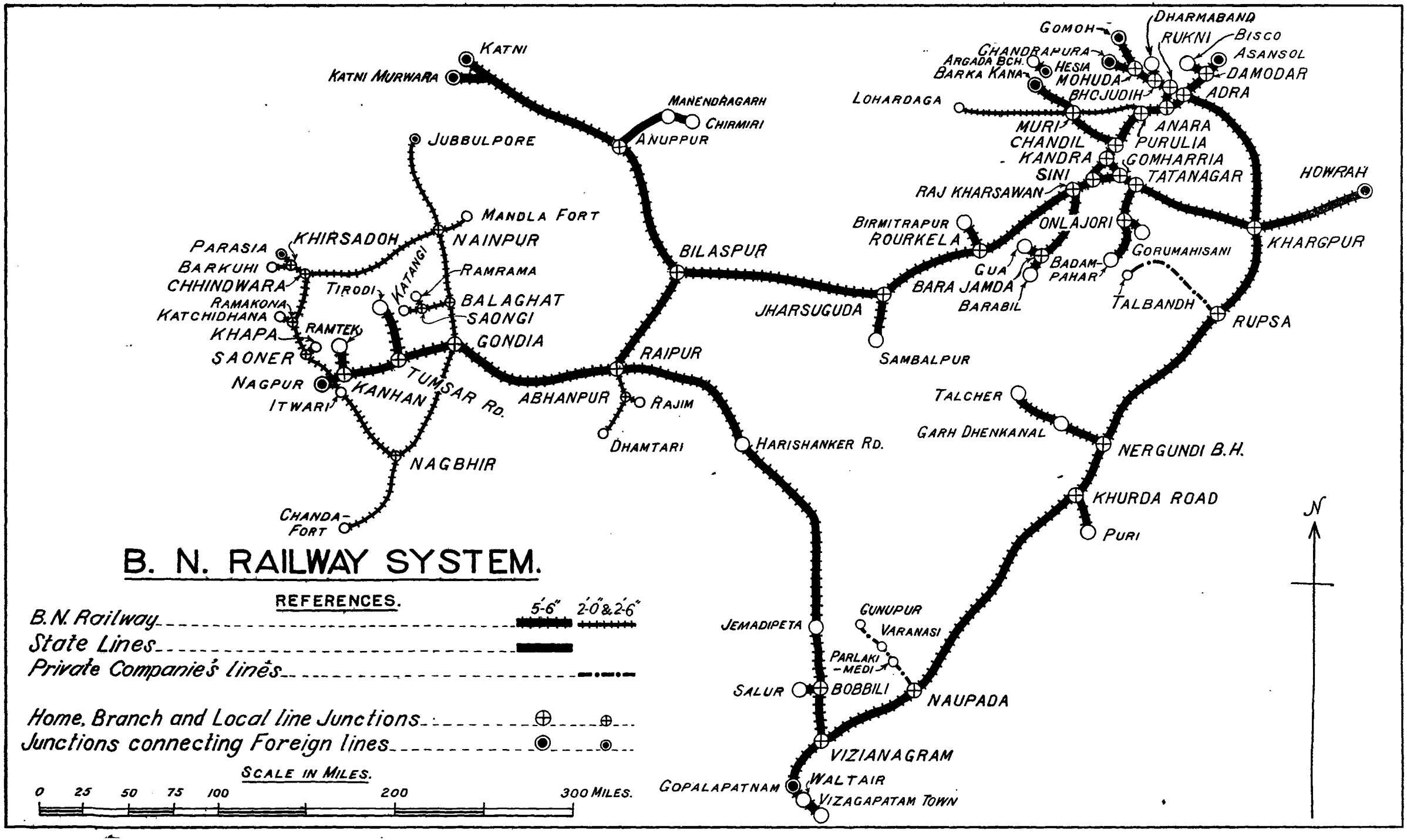
Curves.—The sharpest curve is of 1,500 ft. radius near Sidhwalia.

Gradients.—The ruling gradient is 1 in 1,000 with two exceptions of 1 in 500 at Harkhua and Manjhagarh.

Contracts—Main Provision of Contract— As noted under Bengal and North-Western Railway.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings	Interest divided in the ratio of gross earnings.	Payment made to the Bengal and North-Western Railway Company for working the line.	Total income.	Percentage of total income on total capital outlay given in column 3.	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1930-31 .	39·32	19,28,740	10,215	5,416	..	..	5,416	0·28	87,646	—82,230	23	46·98
1931-32 .	39·32	22,89,454	69,910	37,590	1,476	..	39,066	1·71	1,19,164	—80,098	34	46·23
1932-33 .	39·32	23,32,213	1,00,668	55,764	4,025	..	59,789	2·56	1,28,020	—68,231	49	44·61
1933-34 .	39·32	23,43,865	1,36,467	76,646	1,747	..	78,393	3·34	1,26,953	—48,562	67	44·12
1934-35 .	39·32	23,44,744	1,18,291	64,512	3,496	..	68,008	2·90	1,21,904	—53,896	58	45·46
1935-36 .	39·32	23,56,828	1,21,257	65,127	3,530	..	68,657	2·91	1,18,715	—50,058	59	46·29
1936-37 .	39·32	23,58,666	1,24,286	70,118	3,738	..	73,856	3·13	1,13,879	—40,023	61	43·58
1937-38 .	39·32	23,58,872	1,53,285	83,570	1,816	..	85,386	3·62	1,12,277	—26,891	75	45·48
1938-39 .	39·32	23,58,725	1,53,969	79,746	1,496	..	81,242	3·44	1,10,864	—29,622	75	48·21



B. N. RAILWAY SYSTEM.

REFERENCES.

	5'-6"	2'-0" & 2'-6"
B.N. Railway	———	———
State Lines	———	
Private Companies lines		—·—·—
Home, Branch and Local line Junctions	⊕	⊕
Junctions connecting Foreign lines	◉	◉

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.

3. BENGAL-NAGPUR RAILWAY SYSTEM.

Chairman and Managing Director.—Sir T. R. WYNNE, K.C.S.I., K.C.I.E.

Office.—132, Gresham House, Old Broad Street, London, E. C. 2.

Date of registration of the Company.—23rd February 1887.

Lines comprised in the system.—The Bengal-Nagpur railway system is made up of—

		Open line.	Under construction or sanctioned for construction.	Total.
		Miles.	Miles.	Miles.
(*a*)	Bengal-Nagpur railway proper (5′ 6″ gauge) . . . . 2,090·32	2,411·92	§33·95	2,445·87
	East Coast railway, Northern section (5′ 6″ gauge)¶ . . 321·60			
(*b*)	Anuppur-Chirimiri (5′ 6″ gauge)	53·84	..	53·84
(*c*)	Mayurbhanj Light railway (2′ 6″ gauge)	70·64	..	70·64
(*d*)	Parlakimedi Light railway (2′ 6″ gauge)	56·30	..	56·30
(*e*)	Purulia-Ranchi branch (2′ 6″ gauge)	116·54	..	116·54
(*f*)	Raipur-Dhamtari branch (2′ 6″ gauge)	56·94	..	56·94
(*g*)	Satpura railway (2′ 6″ gauge)	625·92	..	625·92
(*h*)	Tumsar-Tirodi Light railway (2′ 0″ gauge) (Line dismantled on 15-2-36) .	..	..	..
	Total . .	3,392·10	33·95	3,426·05

Running powers—

Home line over Foreign lines

At Asansol and Katrasgarh, East Indian railway for passenger and goods train only			1·16
At Howrah, East Indian railway, for passenger trains only			1·09
Chandrapura to Barkakana, East Indian Railway, for goods trains only			54·34
K. P. Dock Junction—Tikiapara *via* Wellingdon Bridge for goods trains only.	E. I. Ry. . . 16·00		28·00
	E. B. Ry. . . 12·00		
	Total .		84·59

Foreign lines over Home lines :—

Great Indian Peninsula railway, Nagpur to Itwari Bazar for goods trains only	2·39
Madras & Southern Mahratta railway, Vizagapatnam to Gopalapatnam for passenger and goods trains	6·76
East Indian Railway, Jamuniatend to Chandrapura for goods trains only	7·26
Total .	16·41

(*a*) Bengal-Nagpur railway (5′ 6″ gauge)—

The Bengal-Nagpur Railway Company was formed in 1887 and took over the Nagpur-Chhattisgarh State railway and constructed other lines, embracing in all a system of railways known as the Bengal-Nagpur railway.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
BENGAL-NAGPUR PROPER—					
Main line—					
Asansol to Damodar	12-6-89	4·62			
Damodar to Purulia	14-12-89	46·00			
Purulia to Chakardharpur	22-1-90	71·54			
Chakardharpur to Goilkera	15-5-90	21·17			
Goilkera to Jharsuguda	1-2-91	104·92			
Jharsuguda to Raigarh	20-4-90	43·35			
Raigarh to Bilaspur	10-2-90	82·23			
Bilaspur to Raipur	10-1-89	68·79			
Raipur to Raj-Nandgaon	4-12-88	43·13			
Raj-Nandgaon to Nagpur	1880, '81 & '82*	144·20	629·95		* These are the dates of opening in sections of the original 3′ 3½″ gauge line, which was converted to the 5′ 6″ gauge and reopened on the 27th November 1888.
Adra avoiding line	24-3-24	2·23			
Kandrra-Gomharria Chord	2-12-19	6·42			
Anara-Rukni Chord	3-5-20	5·00			
Chetudih-Dharmabandand Kharkhari Chord	18-2-27 & 9-12-27	3·87	17·52		
Extensions—					
Matyala B. H. to Garh Dhrubeshwar . .	2-9-26	2·19	2·19		
Branches—					
Gua Branch—					
Raj Kharsawan (Amda) to Dangoaposi .	17-1-24	45·91			
Dangoaposi to Gua	20-2-25	18·82			
Barabil Branch	16-2-26	4·35	69·08		
Birmitrapur Branch‖—					‖ This line was constructed by the Panposh Raipur Ry. Co. It was acquired by Govt. and taken over by B. N. Ry. Co. from 1-4-23.
Rourkela to Koel Bank . . .	17-9-26	2·28			
Koel Bank to Birmitrapur	21-1-22	15·61	17·89		
Sambalpur Branch—					
Jharsuguda to Sambalpur	1-2-93	29·88	29·88		
Katni Branch—					
Bilaspur to Birsingpur	1-2-91	141·70			
Birsingpur to Umaria	11-5-90	18·48			
Umaria to Katni	2-11-86	36·58			
Katni to Murwara Junction. . . .	1-1-01	0·56	197·32		
Carried over .	..	..	963·83		

¶ Transferred for working as an integral part of the Bengal-Nagpur railway from the 1st January 1901.

§The construction of a line from Contai Road to Contai was sanctioned in Railway Board's letter No. 138-P., dated 20th June 1928 but owing to lack of funds the work has been deferred.

3. BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

(*a*) Bengal Nagpur Railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward	..	..	963·83		
Branches—contd.					
Raipur-Vizianagram Railway—					
Parvatipuram to Jamedipeta	31-3-30	19·75			
Jemadipeta to Rayaghada	12-4-30	9·47			
Rayaghada to Theruvali	31-3-31	11·79			
Length from centre of Parvatipuram station to yard which has been opened as part of Main Line.	..	0·53			
Raipur to Jonk	15-11-29	65·87			
Jonk to Harishanker Road	30-3-30	25·55			
Harishanker Road to Titilagarh	30-9-30	34·81			
Titilagarh to Theruvali	20-12-31	74·01			
R. V. Railway entry line at Raipur	16-5-30	0·36			
Vizianagram to Bobbili	24-12-08	33·54			
Bobbili to Parvatipuram	8-3-09	14·76			
			290·44		
Tumsar-Tirodi B. G. Conversion—					
Tumsar Road to Tirodi	1-9-29	29·32	29·32		
Kalumna-Itwari-Nagpur Section—					
Kalumna to Nagpur *via* Itwari	15-3-11	3·84	3·84		
Ram Tek Branch—					
Kanhan to Dhattapahar	26-9-07	14·76	14·76		
Sanctoria Coal Branch—					
Damodar to Sanctoria Collieries	12-6-89	8·11			
			8·11		
Chaurashi Branch—					
Ramkanali to Nadiha Colliery Siding No. 7	1-2-03	8·36	8·36		
Calcutta Extension Main Line—					
Sini to Khargpur	1-6-98	98·40			
Khargpur to Khal Bridge	17-12-98	44·62			
Dinan Khal Bridge to Rajapur Khal	24-5-00	16·84			
Rajapur Khal to Tikipara (Howrah)	14-12-00	16·92			
			176·78		
Fort Gloster Branch	1900-1917	1·56			
East Rupnarain Bank		0·81			
Kidderpore Port Line		0·63			
			3·00		
Calcutta Extension Branches—					
Shalimar Branch—					
Santragachi to Shalimar	15-3-01	3·15	3·15		
Tatanagar-Gorumahisani Branch—					
Tatanagar to Onlajori	1-2-11	34·18			
Onlajori to Gorumahisani	6-4-11	6·06			
Onlajori to Badampahar (including Salapet Branch).	23-10-22	21·30			
			61·54		
Cuttack Extension Main Line—					
Khargpur to Balasore	17-12-98	70·58			
Balasore to Cuttack	10-1-99	110·41			
			180·99		
Branches—					
Nergundi Block Hut to Talcher	20-1-27	61·52	61·52		
Jharia Extension Main Line—					
Khargpur to Cossye River	20-12-99	5·18			
Right Bank of Cossye River to Midnapur	8-6-01	2·13			
Midnapur to Bhojudih	1-2-03	114·95			
Bhojudih to Gomoh (*via* Talgaria)	1-1-07	25·98			
Sudamdih Block Hut to Bhowrah Block Hut	17-2-14	2·06			
Mohuda avoiding line	10-7-26	1·01			
			151·31		
Branches and Extensions on Jharia Coalfields—					
Bhojudih-Bhaga-Malkera Loop—					
Bhojudih to Bhaga	20-4-03	7·45			
Bhaga to Malkera	1-9-03	8·78			
Malkera to Mohuda	15-6-04	3·15			
			19·38		
Bhowrah Branch	14-5-06	2·96	2·96		
Bhojudih-Pathardih Link	1-2-06				
	10-1-15	0·84	0·84		
Katras Connection—					
Malkera to Katras	24-8-03	0·60			
Khanoodih to Katras	1-1-07	1·91			
			2·51		
Murulidih Branch—					
Mohuda to Murulidih Collieries	1-1-07	3·66	3·66		
Jamadoba Loop	16-9-03	5·29			
Jeetpur Connection between Bhowrah and Jamadoba Loop.	26-11-26	1·28			
			6·57		
Kendwa Branch	10-10-99	2·50	2·50		
Aldih Branch	1-2-06	2·54	2·54		
Carried over	..	..	1,997·91	..	

3. BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

(*a*) Bengal-Nagpur Railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks
1	2	3	4	5	6
Brought forward . .	..	..	1,997·91		
Bokharo Ramgarh Extension—					
Section I.—Mohuda to Chandrapura . . .	27-11-13	9·10	9·10		
Section II.—Barkakana to Chandil . . .	31-3-27	71·60	71·60		
Connection of B. N. and E. I. Railways at Nunudih Link—					
B. N. Railway's own Line	5-3-15	0·90			
B. N. and E. I. Railways joint Line	5-3-15	0·46	1·36		
Bobbili Salur Branch—					
Bobbili to Salur	1-5-13	10·35	10·35		
Total open Mileage, Bengal-Nagpur Railway Proper.				2,090·32	
East-Coast railway, Northern Section—					
Main line—					
Cuttack to Bhubaneswar	1-2-97	17·20			
Bhubaneswar to Khurda Road	20-7-96	11·48			
Khurda Road to Rambha	1-3-96	61·86			
Rambha to Berhampore (Ganjam)	1-9-95	29·54			
Berhampore (Ganjam) to Palasa	1-4-95	45·99			
Palasa to Naupada	17-12-94	15·40			
Naupada to Vizianagram	20-9-94	72·94			
Vizianagram to Waltair and Gopalapatnam (including wharf).	15-7-93	40·35	294·76		
Branches—					
Puri branch—					
Khurda Road to Puri	1-2-97	26·84	26·84		
Total East Coast Railway, Northern Section . .	..	..	..	321·60	
Grand Total open mileage, Bengal-Nagpur Railway 5′ 6″ gauge.	..	..	..	2,411·92	
Double Line—					
Bengal Nagpur Railway Proper—					
Khargpur District—					
Howrah (Tikapara) to Santragachi	2-12-00	3·70			
Santragachi to Bauria	17-6-02	10·24			
Bauria to Khargpur	15-3-07	56·62			
	22-9-28	0·12			
Rupnarian Bridge	23-3-33	0·52			
Shalimar Branch	15-3-01	3·15			
Khargpur to Cossye Bridge	28-7-24	5·18			
Midnapore to Tantigeria B. H.	13-1-28	1·37	80·90		
Chakardharpur Disrtrict—					
Sini to Chakardharpur	25-1-24	21·93			
Chakardharpur to Goilkera	28-5-25	20·62			
Goilkera to Manharpur	25-4-27, 28-12-27 and 24-12-29	16·34			
Khorkai Bridge to Tatanagar	14-6-32	2·18			
Gomharria to Khorkai Bridge	19-11-23	4·11	65·18		
Nagpur District—					
Kamptee to Kalumna	16-9-26	4·29	4·29		
Adra District—					
Kargali to Gowai	26-10-22	7·38			
Gowai to Bhojudih	29-9-25	1·62			
Bankura to Adra	4-1-16	33·17	42·17		
Anara-Kandra Branch—					
Anara to Purulia	21-3-24	16·00			
Purulia to Tamna	19-11-24	4·25			
Tamna to Kantadih	12-4-24	4·91			
Kantadih to Nimdih	26-7-24	19·00			
Nimdih to Kandra	18-11-24	14·26	58·42		
Titilagarh District—					
Gopalapatnam to Waltair	1-4-21	3·88	3·88		
Total Double Line . .	..	..	..	254·84	

3. BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

(*a*) Bengal-Nagpur railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The line is laid with 75-lb., 85-lb. and 90-lb. steel rails on transverse wooden, steel and cast iron pot sleepers.

Ballast.—The line is ballasted throughout with stone, except between Khargpur and Garbetta where laterite is used.

Fencing.—The line is fenced only between Nagpur and Kamptee and at the more important stations also at some of the station yards and first class level crossings on the Barang-Waltair section.

Curves.—On the main line there are no curves sharper than 1,000 feet radius.

Gradients.—The ruling gradient between Asansol and Nagpur, and Bilaspur and Katni is 1 in 100; between Sini and Khargpur, 1 in 125; between Khargpur and Waltair, 1 in 150; between Khargpur and Howrah, and Khurda Road and Puri, 1 in 200; and between Midnapore and Bhojudih, 1 in 200 in the down direction, and 1 in 125 in the up direction; and between Vizianagram and Parbatipuram, 1 in 125. On the Gua branch it is 1 in 60 and between Bermo and Barkakhana 1 in 100; and between Barkakhana and Chandil it is 1 in 200 compensated for curves. On the Talcher coalfield branch it is 1 in 100 compensated with the loads, *i.e.*, towards Nergundi and 1 in 150 against the loads.

Contracts—

Dated the 9th March 1887 (called the original contract), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to taking over certain State railways and the construction of other lines, and their management, maintenance and working.

Dated the 31st December 1891 (supplemental to the contract of 1887), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the construction and working of the Sambalpur Branch railway.

Dated the 27th June 1901 (called the Debenture contract, supplemental to the contract of 1887) *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the issue of debentures.

Dated the 23rd January 1902 (supplemental to the contract of 1887), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the construction of certain new lines and the working of the Northern section of the East Coast railway.

Dated the 28th April 1903 (supplemental to the contract of 1887), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange. [*Cancelled as from 1st October 1921 by the contract of 19th November 1923.*]

Dated the 22nd February 1910 (supplemental to the contracts of 1887, 1891, 1901, 1902 and 1903), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the construction of certain further extensions and branch lines in connection with the Company's undertaking and to certain questions under the contract of 1902.

Dated the 5th November 1912 (supplemental to the contracts of 1887, 1891, 1901, 1902, 1903 and 1910), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to certain modifications of the original contract of 1887 as varied by the several supplemental contracts.

Dated the 4th March 1914 (supplemental to the contracts of 1887, 1891, 1901, 1902, 1903, 1910 and 1912), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

Dated the 19th November 1923 (supplemental to the above quoted contracts), *between the Secretary of State and the Bengal-Nagpur Railway Company*, as to compiling accounts and Statistics annually instead of half-yearly, and as to rate of exchange.

Dated the 24th November 1927 (supplemental to the above quoted contracts) between the Secretary of State and the Bengal-Nagpur Railway Company as to the construction and working of certain branch lines.

Dated the 14th May 1929 (supplemental to above quoted contracts) between the Secretary of State and the B. N. Ry. Company, as to rate of exchange.

Dated the 2nd May 1930 (supplemental to the above quoted contracts) as to the taking over of the Jamuniatand-Chandrapura Line from the 1st April 1928.

Dated the 8th January 1937 (Supplemental to the above quoted contracts) between the Secretary of State in Council for India and the Bengal-Nagpur Railway Company as to provisions, if required, of suitable buildings for Postal Department of Government of India on yearly rental.

Main provisions of contracts—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*—Guarantee of interest at 4 per cent. per annum in sterling on the Company's ordinary capital of £3,000,000 up to the 31st December 1913. Thereafter on this ordinary capital and on any further ordinary capital that may be required, the guarantee to be 3½ per cent.

3. BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

(a) Bengal-Nagpur railway (5′ 6″ gauge)—*contd.*

Main provisions of contracts—*concld.*

(iii) *Distribution of profits*—

(*A*) *Up to 31st December 1913.*—The net earnings for any complete calendar year up to December 1912 and thereafter for any complete financial year, after providing for :—

(*a*) payment to Government of interest on advances made by Government for capital expenditure on the Company's extensions and on over-drafts of capital in connection with open line capital expenditure, at 3½ per cent. per annum up to and including 30th June 1909, and thereafter at 3¾ per cent. per annum (except for advances of capital expenditure on the Company's old extensions, interests on which continued to be paid at 3½ per cent. per annum).

(*b*) repayment of interest paid by Government to the Company for that year, and

(*c*) payment of interest on capitalized interest under clause 21 of the supplemental contract dated 23rd January 1902,

are divided in the ratio of ¾ths to the Government and ¼th to the Company, if the ordinary capital of £3,000,000 is not increased before that date. If the said capital is increased, the Company's share of surplus profits shall be increased by the fraction which shall bear to one-fourth the same proportion as the additional capital bears to the existing capital of £3,000,000.

As from 1st January 1901, interest at 3½ per cent. per annum on the capital expended by the Government on the Northern section of the East Coast railway, is a charge against the net earnings of the Company's undertaking, and the ¼th share of surplus profits formerly payable to the Company is further divisible between the Government and the Company in the proportion which the gross earnings of the Northern section of the East Coast railway bear to the gross earnings of the remainder of the Company's undertaking.

(*B*) *From 1st January 1914.*—With effect from the 1st January 1914, the net earnings attributable to the two half-years of a financial year, less—

(*a*) interest (not charged to capital under the provisions of the contract of 22nd February 1910) on debentures or debenture stock of the Company,

(*b*) guaranteed interest on Company's open line capital, and

(*c*) interest at 3½ per cent. on the Secretary of State's open line capital,

shall be divided between the Secretary of State and the Company in the ratio of the average amount during the year of the Secretary of State's open line capital and the Company's open line capital, in accordance with the contract of the 5th November 1912.

(iv) *Rates and fares.*—The Government to authorise maximum and minimum rates, and prescribe the various classes of passengers and goods as well as the extent to which, within the maxima and minima, the Company may vary the rates in respect of distance, weight or special conditions.

(v) *Special obligations as to the conveyance of*—

(*a*) Mails, troops, police, high Government officials and Government stores.—To be conveyed on the same general conditions as those in force on State railways of the same gauge and at rates to be approved by Government.

(*b*) Government bullion and coin and the persons in charge thereof.—To be carried at special rate approved by Government.

(vi) *Power of the Government to determine contract.*—The railway and its appurtenances are declared to be absolutely the property of the Government, which may determine the contract on the 31st December 1950 or on the 31st December of any succeeding fifth year by giving to the company in England twelve months' previous notice in writing.

On the termination of the contract the Company is to hand over to the Government the railway and all its belongings of every description, and the Government are to repay the amount at par of the share capital which has been paid in by the Company.

The contracts of 23rd January 1902 and 22nd February 1910 provide for the construction, maintenance and working of the new lines as part of the Company's undertaking, and are to remain in force until the original contract of 1887 shall be determined.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi) or (vii)].—None specified.

3. BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

(*a*) Bengal-Nagpur railway (5′ 6″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1888 will be found in Appendix 38 to the Railway Administration Report for 1907).—

Includes the Northern section of the late East Coast railway, the Satpura railway, the Purulia-Ranchi and Raipur-Dhamtari branches and the Tumsar-Tirodi Light railway.

The Statistics of working of the Purulia-Ranchi and Raipur-Dhamtari branches and the Satpura Railway are also shown separately in tables (*e*), (*f*) and (*g*) respectively.

NOTE.—From the year 1936-37 the net earnings/working expenses have been arrived at after taking into account the 'Appropriation to Depreciation Reserve Fund' instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Payment on account of rebate, etc., to branch lines worked.	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Percentage of Company's share of net earnings (surplus profits *plus* guaranteed interest on share capital) on Company's capital.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	Rs.	
1888 .	224·50	5,23,92,291	15,83,293	5,17,461	0·99	..	23,62,947	..	..	—18,45,486	136	67·32
1889 .	348·18	7,08,75,456	20,40,944	4,03,160	0·57	..	29,96,364	..	..	—25,93,204	112	80·25
1890 .	586·01	8,14,66,762	28,64,578	5,47,463	0·67	..	33,88,852	..	..	—28,41,389	94	80·89
1891 .	831·58	9,08,04,164	54,57,356	26,84,453	2·96	..	35,05,676	..	..	— 8,21,223	126	50·81
1892 .	831·58	9,56,14,736	60,83,562	30,08,166	3·05	..	39,05,345	..	..	—8,97,179	141	50·55
1893 .	862·33	9,80,08,424	64,17,751	32,62,220	3·33	..	43,97,594	..	..	—11,35,374	144	49·17
1894 .	860·88	9,81,73,789	66,90,648	32,58,414	3·32	..	45,83,993	..	..	—13,25,579	149	51·30
1895 .	860·38	9,88,94,777	68,74,740	35,41,444	3·58	..	48,56,800	..	..	—13,15,356	153	48·48
1896	860·88	11,05,30,319	63,68,525	29,27,869	2·65	..	48,27,504	..	..	—18,99,635	142	54·08
1897 .	860·88	18,04,58,784	65,00,309	29,79,559	2·28	..	51,35,240	..	..	—21,55,681	138	51·94
1898 .	1,067·41	14,67,03,520	62,79,193	33,63,854	2·29	..	54,23,186	..	..	—20,59,332	124	51·10
1899	1,190·16	16,65,90,365	90,73,460	47,21,814	2·83	..	59,75,853	..	..	—12,54,039	147	47·96
1900 .	1,284·35	17,41,74,604	1,29,75,223	77,13,050	4·43	..	64,90,637	1,83,591	..	+10,38,822	194	40·56
1901 .	1,609·22	21,28,65,061	1,30,77,769	61,48,648	2·89	..	79,88,163	..	..	—18,39,515	156	52·98
1902 .	1,602·24	23,05,09,658	1,42,18,227	69,37,742	3·01	..	85,44,311	..	..	—16,06,569	170	51·21
1903 .	1,815·65	24,97,58,940	1,55,47,702	70,45,255	2·82	..	89,66,131	..	..	—19,20,876	165	54·69
1904 .	1,965·68	26,14,35,453	1,89,12,137	95,87,326	3·67	..	95,41,624	..	..	+19,45,702	185	49·31
1905 .	1,980·47	27,33,72,570	2,44,70,900	1,34,04,052	4·90	..	1,00,32,318	6,67,100	..	+27,04,634	238	45·22
1906 .	1,996·50	28,49,48,582	2,69,47,181	1,41,51,252	4·97	..	1,03,41,779	7,89,837	..	+30,19,036	259	47·49
1907 .	2,113·35	30,91,90,534	2,89,80,537	1,48,46,149	4·80	..	1,08,35,545	9,21,460	..	+30,89,144	263	48·77
1908 .	2,300·86	32,39,77,888	2,71,55,960	1,14,06,971	3·52	..	1,12,34,515	..	..	+1,72,453	227	57·99
1909 .	2,348·63	33,91,49,381	2,87,72,437	1,31,42,676	3·88	..	1,16,99,565	2,93,048	..	+11,50,063	236	54·32
1910 .	2,395·39	34,75,04,066	3,08,52,867	1,50,32,327	4·33	..	1,20,04,393	6,22,284	..	+24,05,660	248	51·28
1911 .	2,488·92	35,59,06,842	3,39,70,044	1,68,21,823	4·78	..	1,22,61,552	9,63,507	6·14	+35,96,764	262	50·44
1912 .	2,489·92	36,36,14,944	4,02,82,849	2,18,48,526	6·01	..	1,24,78,206	20,44,679	8·54	+73,25,641	311	45·70
1st qr. of 1913	2,489·92	36,86,24,074	1,15,26,259	59,47,752	1·61	..	31,56,237	5,82,674	2·29	+22,08,841	356	48·40
1913-14	2,673·32	38,74,52,167	4,20,59,348	2,15,05,714	5·55	..	1,34,01,930	14,99,335	7·20	+66,04,449	303	48·87
1914-15	2,670·82	40,20,55,383	4,10,00,804	2,03,23,627	5·05	..	1,43,12,277	8,32,616	5·35	+51,72,734	295	50·43
1915-16	2,683·66	40,76,70,217	4,43,73,284	2,26,25,105	5·56	..	1,47,79,386	10,94,706	6·93	+67,51,013	318	49·01
1916-17	2,738·15	40,99,06,116	5,12,28,422	2,65,02,647	6·49	..	1,47,55,302	15,95,201	7·04	+1,02,42,144	359	48·09
1917-18	2,741·00	41,38,74,577	5,63,92,542	3,01,32,863	7·28	..	1,57,70,715	20,22,026	7·99	+1,23,40,122	396	46·57
1918-19	2,732·44	42,01,64,651	6,20,86,778	3,13,17,280	7·45	..	1,56,50,850	20,25,686	8·00	+1,36,40,744	437	49·56
1919-20	2,732·46	44,88,17,294	6,57,56,972	2,72,60,622	6·07	..	1,75,41,657	14,62,055	6·16	+82,56,010	463	58·54
1920-21	2,734·24	45,99,72,904	6,42,66,227	2,18,82,116	4·47	24,398	1,73,69,068	6,54,109	4·96	+38,33,641	452	65·95
1921-22	2,745·57	53,38,36,276	6,77,00,233	1,92,95,920	3·61	24,833	2,28,40,157	..	3·50	−35,69,070	472	71·50
1922-23	2,765·95	57,16,21,258	7,60,76,669	2,73,68,561	4·79	1,43,873	2,43,98,916	6,13,916	4·83	+22,11,856	529	64·08
1923-24	2,844·09	60,51,97,855	7,80,21,353	2,69,71,096	4·46	32,375	2,60,27,552	4,97,494	4·46	+4,13,675	528	65·43
1924-25	2,859·19	63,83,53,918	8,31,16,587	2,96,30,712	4·64	35,856	2,69,00,289	6,16,880	4·57	+20,77,737	559	64·35
1925-26	2,905·18	66,58,90,367	8,41,55,096	3,15,83,900	4·74	21,998	2,86,90,575	6,92,128	4·64	+21,79,199	557	62·47
1926-27	3,046·10	68,47,91,908	8,31,52,004	3,50,92,678	5·12	17,696	2,95,27,480	8,71,128	4·78	+46,76,374	524	57·80
1927-28	3,046·82	70,18,67,084	9,16,23,492	3,54,93,361	5·06	19,453	3,06,10,075	7,47,583	4·78	+41,16,250	575	61·23
1928-29	2,992·48	71,61,07,337	9,18,56,376	2,36,95,882	3·31	24,099	3,22,63,199	7,46,511	4·78	−93,37,927	589	74·20
1929-30	3,104·60	74,16,50,599	9,26,40,226	1,48,59,361	2·00	52,258	3,22,13,293	..	3·50	—1,74,06,100	572	83·96
1930-31	3,161·71	75,75,58,655	8,09,02,761	1,71,54,277	2·26	48,704	3,48,77,898	..	3·11	—1,77,72,325	491	78·80
1931-32	3,236·27	76,77,25,350	7,22,95,162	1,11,88,505	1·46	66,353	3,54,63,466	..	3·11	—2,43,41,314	427	84·52
1932-33	3,231·69	76,99,05,062	6,99,76,023	1,82,56,597	2·53	—16,463	3,54,56,271	..	3·11	—1,71,83,211	415	73·91
1933-34	3,230·97	77,13,69,858	7,57,90,373	2,22,18,789	2·88	95,028	3,45,93,299	..	3·11	—1,24,69,538	450	70·68
1934-35	3,215·39	77,45,41,433	8,08,82,106	2,38,69,781	3·08	51,574	3,35,68,554	..	3·11	—97,50,347	482	70·49
1935-36	3,211·50	77,75,04,423	8,68,26,690	2,64,82,147	3·41	69,883	3,30,80,404	..	3·11	—66,68,140	517	69·50
1936-37	3,211·47	77,83,53,495	8,33,72,068	1,71,58,543	2·20	58,244	3,22,77,738	..	3·11	—1,51,77,439	498	79·42
1937-38	3,211·47	77,23,53,328	9,40,80,497	2,68,33,996	3·48	61,916	3,24,12,592	4,18 396	4·00	—60,08,908	562	71·42
1938-39	3,211·82	77,64,58,805	9,39,96,178	2,45,44,327	3·16	58,969	3,22,44,313	..	3·11	—77,58,955	561	73·89

NOTE.—In the above table the figures from 1888 to 1915 -16 are exclusive of Tumsar Tirodi Light Railway and the rest are inclusive.

(*b*) Anuppur-Chirimiri (5′ 6″ gauge).—

This is a section of the Central India Coalfields Railway running from Anuppur, a station on the Bilaspur-Katni Branch of the Bengal-Nagpur Railway to Chirimiri to serve Jhagrakhand and Balarpur collieries in the Korea State.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Anuppur to Bijuri	17-6-28	29·61	
Bijuri to Manendragarh	25-4-29	10·42	
Manendragarh to Chirimiri	23-1-31	13·81	53·84

3. BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

(*b*) Anuppur-Chirimiri (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of steel flatfooted second hand rails weighing 75 lbs., 85 lbs. and 88½ lbs. and have been laid to the extent of 79·4, 12·0 and 8·6 per cent. of the total length respectively. The sleepers are of Deodar and Sal wood each 9′ 0″ in length.

Ballast.—The ballast consists of broken stones and ashes at 9 cft. per foot run.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 573 feet 10°. Ratio of curve to total length of line is 26·81 per cent. and average amount of curvature per mile is 51·37°.

Gradients.—The ruling gradient is 1 in 50 compensated longest continuous length of steepest grade is 0·87 miles followed by rise 1 in 91 for 0·37 miles.

Contract.—The Bengal-Nagpur Railway will work the above section as a temporary measure for the same percentage of gross earnings as obtained from year to year on the B. N. Railway (Broad gauge) system with an addition of 5 per cent. on the gross earnings to cover the use of rolling stock, this arrangement being terminable, by either party on 12 months' notice (*vide* Railway Board's letter No. 4467-F., dated the 26th June 1928 to the Agent, B.-N. Railway).

Statistics of Working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1928-29	29·61	88,77,433	62,383	13,400	0·15	40	78·50
1929-30	40·03	77,19,620	66,890	7,826	0·10	32	88·32
1930-31	53·85	1,19,99,902	78,739	10,702	0·09	28	86·41
1931-32	53·85	1,19,91,757	1,11,503	10,574	0·09	40	90·52
1932-33	53·85	* 1,20,53,274	2,14,305	28,820	0·24	76	86·55
1933-34	53·84	* 1,22,56,133	4,44,287	1,30,046	1·06	158	70·73
1934-35	53·84	*1,22,85,285	6,19,706	(*a*) 2,32,868	1·90	221	64·82
1935-36	53·84	*1,23,34,117	6,83,783	(*b*) 1,83,397	1·49	243	73·18
1936-37	53·84	*1,23,46,054	7,93,944	(*b*)(*c*)2,52,331	2·04	283	68·22
1937-38	53·84	*1,23,46,402	11,12,794	(*b*)(*d*)3,45,419	2·79	396	68·85
1938-39	53·84	*1,23,46,183	11,43,928	(*b*) 4,49,660	3·64	407	60·69

* Included in the capital at charge of the E. I. Rly. (5′ 6″ gauge).

(*a*) Includes Rs. 14,839 which was excess recovered by B. N. Railway in 1933-34 now refunded.

(*b*) Included in the Gross earnings of the E. I. Railway (5′ 6″ gauge).

(*c*) Rs. 8,824, being the outstanding balance of net earnings for 1935-36 payable to E. I. Railway was erroneously not included in the figure.

(*d*) Excludes Rs. 4,566 credited to E. I. Railway in 1937-38 in respect of transfer to that Railway of Renewals and Replacements expenditure for 1935-36.

(*c*) Mayurbhanj Railway (2′ 6″ gauge)—

Managing Agents.—MESSRS. HOARE MILLER & Co., Calcutta.

Date of registration of the Company.—1915.

The section from Rupsa to Baripada, formerly known as the Mayurbhanj State Railway, was owned by the Mayurbhanj State. It was acquired by the Mayurbhanj Railway Company and merged in their undertaking from the date the section from Baripada to Talband was opened.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Rupsa to Baripada	20-1-05	32·41	
Baripada to Talband	15-7-20	38·23	
TOTAL	..	..	70·64

Details of construction—

Permanent-way.—The line is laid with 30 and 31-lb. flat-footed steel rails on sâl sleepers.

Ballast.—The Rupsa-Baripada section is ballasted with screened laterite grauel and broken laterits and the Baripada-Talband section, with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 100 between Rupsa and Baripada and 1 in 80 between Baripada and Talband.

3. BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

(c) **Mayurbhanj Railway** (2' 6" gauge)—*contd.*

Contracts—

Dated the 2nd December 1918, *between the Mayurbhanj State and the Mayurbhanj Railway Company*, as to the acquisition by the latter of a line of railway from Rupsa to Baripada from the former.

Dated the 11th August 1922, *between the Secretary of State and the Mayurbhanj Railway Company*, as to the construction and working of the Baripada-Talband extension.

Railway Board's letters Nos. 510-P.-16 and 1857-F., dated the 24th April 1920 and 25th May 1923 respectively sanctioning the raising of additional capital to the extent of Rs. 2,75,000.

Dated the 16th July 1923, between the Secretary of State and the Bengal-Nagpur Railway Company for the maintenance, management and working of the Mayurbhanj Railway and the Baripada-Talband Extension.

Main provisions of contracts—

(i) *Land.*—Land in Mayurbhanj territory provided by the Mayurbhanj State free of cost to the Company.

(ii) *Terms of working.*—The line was constructed by Government (from funds supplied by the Company whose property it is) and is managed, maintained, stocked and worked by Government through the agency of the Bengal-Nagpur Railway as if it were a part of its system. For management, maintenance and working the Secretary of State retains 45 per cent. of the gross earnings of the Mayurbhanj Railway.

(iii) *Government aid.*—By way of rebate the Government allow to the company in respect of each year such a sum not exceeding the net earnings of the Bengal Nagpur Railway derived from traffic interchanged between the Bengal-Nagpur Railway and the said Railway, as when added to the net receipts will equal the interest for the year at a rate of 5 per cent. per annum on the share capital of the Company for the time being paid up. They also allow, subject to the conditions mentioned in clause 4, Schedule II of the contract Rs. 6,000 and other actual expenses for or towards the office expenses and expenses of management and direction of the Company as specified in that clause as also all such legal expenses as may be properly incurred by the Company and approved by the Secretary of State under the provisions of the Contract debitable to revenue.

NOTE 1.—The expression "net earnings" represents the balance of "gross earnings" after deduction of 45 per cent. thereof for management, maintenance and working by the Bengal Nagpur Railway.

NOTE 2.—The expression "Net Receipts" represents the "Net Earnings" together with receipts on account of transfer fees and interest on the unexpended capital less such sum as may be payable by way of interest on debentures (if any).

(iv) *Distribution of profits.*—Should the net receipts of the Company exceed the amount sufficient to pay interest at 5 per cent. per annum, such excess is to be applied towards the payment of the office expenses and expenses of management and direction of the Company stated under (iii), the balance if any, being divided equally between the Government and the Company.

(v) *Rates and fares.*—To be sanctioned by the Secretary of State within the maximum and minimum in force on, and the classification of goods to be in conformity with that of the Bengal-Nagpur railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government Officials and Government stores.

(*b*) Government bullion and coin and the persons in charge thereof.

} None specified.

(vii) *Power of the Government to determine contract.*—Government may, by giving 12 months' previous notice of purchase, determine the contract on the 31st March 1950 or on the 31st March in the last year of any subsequent period of 10 years by paying to the Company in rupees 25 times the average of the yearly net earnings (as defined in clause 3 of Schedule ii) during the 3 years immediately preceding the date of determination, but the total amount so payable to the company shall not in any case exceed by more than 20 per cent. the total capital expenditure of the company as appearing in the capital account of the company or be less than such capital expenditure.

Government may also by giving 12 months' previous notice of "Special purchase" determine the contract at any time in the following cases:—

(*a*) when it is considered desirable to alter the gauge of the railway,

(*b*) when it is considered desirable to convert the railway into a line of through communication, and

(*c*) when it is considered desirable to extend the said railway and the Company fails to raise additional capital for such extension within six months from date of receipt of the formal requisition from Government.

If the contract shall be determined by notice of "Special purchase" the Government will pay to the Company in rupees 25 times the average of the yearly net earnings during the three years preceding the date of determination or 115 per cent. of the total capital expenditure of the Company, whichever may be greater.

3. BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

(*c*) Mayurbhanj Railway (2′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of the contract.*—15th July 1920 to 31st March 1950 and thereafter as noted under (vii) above.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open; and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from the Bengal-Nagpur Railway.	Total income (Columns 5+7).	Percentage of total income on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1920-21	70·64	23,47,792	63,438	21,959	0·94	24,398	46,357	1·97	21	65·32
1921-22	70·64	23,80,309	1,11,123	51,867	2·18	24,833	76,700	3·22	30	45·00
1922-23	70·64	23,98,137	1,41,510	77,831	3·25	93,587	1,71,418	7·15	38	45·00
1923-24	70 64	23,99,181	1,75,352	96,444	4·02	32,375	1,28,819	5·37	48	45·00
1924-25	70·64	24,59,502	1,84,792	1,02,199	4·16	35,856	1.38,055	5·61	50	44·70
1925 26	70·64	24,60,583	1,95,474	1,08,258	4·38	21,998	1,30,256	5·27	53	44·62
1926-27	70·64	24,69,923	2,01,438	1,09,084	4·42	17,696	1,26,780	5·13	55	45·85
1927-28	70·64	24,70,128	2,13,086	1,21,131	4·90	19,453	1,40,584	5·69	58	43·15
1928-29	70·64	24,70,128	2,11,349	1,18,725	4·81	24,099	1,42,824	5·78	57	43·83
1929-30	70·64	24,70,128	1,91,536	1,00,635	4·07	52,258	1,52,893	6·19	52	47·46
1930-31	70·64	24,70,128	1,60,954	89,796	3·64	48,704	1,38,500	5·61	44	44·21
1931-32	70·64	24,70,128	1,21,769	65,932	2·67	66,353	1,32,285	5·36	33	45·85
1932-33	70·64	24,70,128	1,13,965	76,626	3·10	—16,463	60,163	2·44	31	32·76
1933-34	70·64	24,70,128	1,07,156	62,507	2·53	95,028	1,57,535	6·38	29	41·67
1934-35	70·64	24,70,128	1,16,047	63,815	2·58	36,735	1,00,550	4·07	32	45·01
1935-36	70·64	24,73,235	1,35,001	74,221	3·00	69,883	1,44,104	5·83	37	45·02
1936-37	70·64	24,74,469	1,33,454	73,401	2·97	58,244	1,31,645	5·32	36	45·00
1937-38	70·64	24,74,482	1,30,907	71,999	2·91	61,916	1,33,915	5·41	36	45·00
1938-39	70·64	24,73,553	1,38,258	76,043	3·07	58,969	1,35,012	5·46	38	45·00

(*d*) Parlakimedi Light Railway (2′ 6″ gauge)—

On the 20th May 1901 the Indian Railways Act, 1890 (IX of 1890), except section 135, was applied to the line. The working of this railway was taken over by the Bengal-Nagpur Railway Company from the 1st January 1902.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Naupada to Parlakimedi	1-4-00	24·62	
Parlakimedi to Varanasi	17-11-29	15·75	
Varanasi to Gunupur	16-11-31	15·93	
Total	..	..	56·30

Details of construction—

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on transverse wooden sleepers.

Ballast.—The line is ballasted throughout with laterite, gravel and stone.

Fencing.—Short lengths of fencing have been provided in a few places where the railway runs in cuttings alongside the road.

Curves.—There are no curves of less than 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

3. BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

(*d*) Parlakimedi Light Railway 2′ 6″ gauge)—*concld.*

Agreement—

Dated the 24th January 1905, *between the Raja of Parlakimedi and the Bengal-Nagpur Railway Company* as to management, maintenance and working.

Dated the 7th March 1930 between the Raja of Parlakimedi and the Bengal Nagpur Railway Company as to management, maintenance and working of Parlakimedi Light Railway including its extension to Gunapur.

Main provisions of agreement—

(i) *Land.*—Provided by the Raja of Parlakimedi at the cost of capital.

(ii) *Government aid.*—Nil. The railway was constructed by the Raja of Parlakimedi, whose property it is. The line with its rolling-stock is managed, maintained and worked by the Bengal-Nagpur Railway Company as if it were part of the Company's undertaking.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The total amount of actual working expenses of the line, including cost of maintenance, is deducted by the Company from the gross receipts, and the balance is paid to the Raja of Parlakimedi.

(v) *Rates and fares.*—Controlled by the Company.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } None specified.

(vii) *Power of the Raja to determine agreement.*—
(viii) *Power of the Company to surrender agreement.*— } The agreement is terminable on 31st December of any year on three months' previous notice given by either party to the other.

(ix) *Term of agreement* [*if not determined under* (vii) *or* (viii)].—None specified.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs	Rs.	Rs.		Rs.	
1913-14 . .	24·62	7,54,914	50,679	18,288	2·42	40	63·91
1914-15 . .	24·62	7,56,324	50,129	17,880	2·36	39	64·33
1915-16 . .	24·62	7,63,417	40,735	852	0·11	32	97·91
1916-17 . .	24·62	7,67,085	48,766	3,653	0·48	38	92·51
1917-18 . .	24·62	7,67,321	54,493	21,184	2·76	43	61·12
1918-19 . .	24·62	7,67,326	53,391	22,157	2·89	42	58·50
1919-20 . .	24·62	7,68,187	69,012	26,649	3·47	54	61·38
1920-21 . .	24·62	7,68,187	75,387	33,248	4·33	59	55·89
1921-22 . .	24·62	7,68,187	76,500	33,860	4·41	60	55·74
1922-23 . .	24·62	7,68,187	78,402	10,295	1·34	61	86·87
1923-24 . .	24·62	7,68,187	73,128	12,393	1·61	57	83·05
1924-25 .	24·62	7,68,187	78,742	47,710	6·21	62	39·41
1925-26 . .	24·62	7,68,187	87,464	45,372	5·91	68	48·12
1926-27 . .	24·62	7,68,187	84,987	43,812	5·70	66	48·45
1927-28 . .	24·62	7,68,187	79,738	45,893	5·97	62	42·45
1928-29 . .	24·62	7,68,187	84,891	44,710	5·82	66	47·33
1929-30 . .	40·37	20,20,602	93,083	38,567	1·91	44	58·57
1930-31 . .	40·37	23,22,135	95,431	25,936	1·12	45	72·82
1931-32 . .	56·30	24,52,629	1,01,693	19,501	0·80	35	80·82
1932-33 . .	56·30	25,36,633	1,21,052	52,751	2·08	41	56·42
1933-34 . .	56·30	25,38,2ɛ6	1,02,748	25,059	0·99	35	75·61
1934-35 . .	56·30	25,50,806	96,863	13,326	0·52	33	86·24
1935-36 . .	56·30	25,80,622	97,098	22,405	0·87	33	76·93
1936-37 . .	56·30	25,86,490	96,319	9,119	0·35	33	90·53
1937-38 . .	56·30	25,80,903	96,486	7,580	0·29	33	92·14
1938-39 . .	56·30	24,94,880	96,704	—3,628	—0·15	33	103·75

(*e*) Purulia-Ranchi branch (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Purulia to Ranchi	15-11-07	72·68	
Ranchi to Lohardaga	6-10-13	42·62	
Re-alignment of Narrow Gauge diversion at Muri.	11-1-27	1·24	
Total open mileage . .	..	..	116·54

3. BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

(*e*) Purulia-Ranchi branch (2′ 6″)—*concld.*

Details of construction—

Permanent-way.—The line is laid with 40-lb. flat-footed steel rails on transverse wooden sleepers.

Ballast.—The line is ballasted with stone and gravel.

Fencing.—Only the important level crossings have posts and chains padlocked.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 80.

Contracts—

The line is an integral part of the Bengal-Nagpur Railway and is worked under the contract noted under Bengal-Nagpur Railway (5′ 6″ gauge).

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 1 to the Railway Administration Report for 1913-14.)—

NOTE.—(*i*) The figures in this table are also included in the Statistics of working of the Bengal Nagpur Railway (5′ 6″ gauge)—*vide* note on the top of the table of Statistics of working of that Railway.

NOTE.—(ii) From the year 1936-37 the $\frac{\text{net earnings}}{\text{working expenses}}$ have been arrived at after taking into account the 'Appropriation to Depreciation Reserve Fund' instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	115·29	67,92,815	5,06,262	2,86,043	4·21	184	43·50
1914-15	115·30	70,97,151	5,73,476	3,21,498	4·53	96	43·94
1915-16	115·30	72,26,864	5,79,880	3,02,935	4·19	97	47·76
1916-17	115·30	73,41,974	5,96,222	3,09,805	4·22	99	48·04
1917-18	115·30	73,75,423	5,54,283	2,60,843	3·54	92	52·94
1918-19	115·30	73,10,420	6,90,368	3,53,397	4·83	115	48·81
1919-20	115·30	73,27,388	7,28,232	3,07,465	4·20	121	57·78
1920-21	115·30	74,72,065	6,52,366	1,32,996	1·78	109	79·61
1921-22	115·30	76,22,621	7,16,510	2,58,999	3·40	120	63·85
1922-23	115·30	77,90,688	8,75,960	3,79,969	4·88	146	56·62
1923-24	115·30	80,02,248	9,35,377	3,99,056	4·99	156	57·34
1924-25	115·30	80,25,427	9,99,899	5,00,298	6·23	167	49·97
1925-26	115·30	85,30,185	10,62,922	5,85,230	6·86	177	44·94
1926-27	116·54	88,01,209	9,82,751	4,25,911	4·84	162	56·66
1927-28	116·54	89,65,232	8,61,198	3,04,318	3·39	141	64·68
1928-29	116·54	89,71,883	9,03,861	3,25,077	3·62	149	64·03
1929-30	116·54	90,45,649	9,18,885	3,14,572	3·48	151	65·70
1930-31	116·54	90,67,504	7,66,188	94,433	1·04	126	87·67
1931-32	116·54	90,69,157	5,74,484	—13,981	—0·15	94	102·43
1932-33	116·54	90,49,265	5,42,459	—3,993	—0·04	89	100·74
1933-34	116·54	90,43,048	5,48,021	10,391	0·11	90	98·10
1934-35	116·54	90,55,659	5,37,514	—74,901	—0·83	88	113·93
1935-36	116·54	90,60,725	4,82,173	—1,52,628	—1·66	79	131·65
1936-37	116·54	90,71,207	4,71,360	—2,71,769	—3·00	78	157·66
1937-38	116·54	90,83,191	4,99,887	—2,29,011	—2·52	82	145·81
1938-39	116·54	90,80,101	4,38,978	—3,11,420	—3·43	72	170·94

(*f*) Raipur-Dhamtari branch (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Raipur to Kurud	10-9-00	31·50		
Kurud to Dhamtari	17-12-00	14·04		
Branch—			15·54	
Abhanpur to Rajim	15-10-00	11·40	11·40	
GRAND TOTAL	..	..	..	56·94

Details of construction—

Permanent-way.—The line is laid with 31-lb. flat-footed steel rails on sâl sleepers.

Ballast.—Moorum or sand and stone in a few cuttings.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 361 feet radius at Raipur station.

Gradients.—The ruling gradient of the line is 1 in 200.

Contracts—

The line is an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under Bengal-Nagpur railway (5′ 6″ gauge).

3. BENGAL-NAGPUR RAILWAY SYSTEM—*contd.*

(*f*) Raipur-Dhamtari branch (2′ 6″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

NOTE.—(i) The figures in this table are also included in the Statistics of working of the Bengal Nagpur Railway (5′ 6″ gauge)— *vide* note on the top of the table of Statistics of Working of that Railway.

NOTE.—(ii) From the year 1936-37 the $\frac{\text{net earnings}}{\text{working expenses}}$ have been arrived at after taking into account the 'Appropriation to Depreciation Reserve Fund' instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Year. 1	Mileage open at end of each year. 2	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction. 3	Gross earnings. 4	Net earnings. 5	Percentage of net earnings on total capital outlay given in column 3. 6	Earnings per mile per week. 7	Proportion of expenses to earnings. 8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14 .	56·94	14,83,688	1,96,572	1,11,930	7·54	66	43·06
1914-15 .	56·94	14,88,663	1,91,811	1,06,506	7·15	65	44·47
1915-16 .	56·94	14,88,376	1,66,190	64,483	4·33	56	61·20
1916-17 .	56·94	14,92,730	1,62,427	74,877	5·02	55	53·90
1917-18 .	56·94	14,94,983	1,44,154	56,177	3·76	49	61·03
1918-19 .	56·94	14,52,079	1,82,385	87,724	6·04	62	51·90
1919-20 .	56·94	14,52,079	1,94,660	82,992	5·72	66	57·37
1920-21 .	56·94	15,65,039	1,83,249	58,209	3·72	62	68·24
1921-22 .	56·94	16,08,369	1,89,192	25,800	1·60	64	86·36
1922-23 .	56·94	16,12,225	2,44,858	82,101	5·09	82	66·47
1923-24 .	56·94	16,55,111	2,74,713	1,00,789	6·09	93	63·31
1924-25 .	56·94	16,60,615	2,78,045	1,09,808	6·61	94	60·51
1925-26 .	56·94	17,93,755	2,98,407	1,66,826	9·30	99	43·14
1926-27 .	56·94	18,46,164	2,83,102	1,45,250	7·87	96	48·69
1927-28 .	56·94	20,28,440	3,29,456	1,81,632	8·95	111	44·87
1928-29 .	56·94	18,53,238	3,44,801	1,88,041	10·15	116	45·46
1929-30 .	56·94	19,42,748	3,32,813	1,62,466	8·36	112	51·18
1930-31 .	56·94	20,43,835	2,45,305	33,642	1·65	83	86·29
1931-32 .	56·94	20,48,010	1,59,192	—20,069	—0·98	53	112·61
1932-33 .	56·94	20,57,683	1,94,937	69,011	3·35	66	64·60
1933-34 .	56·94	20,66,375	1,77,081	—33,959	—1·64	60	119·18
1934-35 .	56·94	20,66,375	1,80,719	—24,284	—1·18	61	113·44
1935-36 .	56·94	20,94,885	2,07,431	—21,788	—1·04	70	110·50
1936-37 .	56·94	21,00,274	2,06,149	5,074	0·24	69	97·54
1937-38 .	56·94	21,00,274	2,17,607	—29,089	—1·39	73	113·37
1938-39 .	56·94	20,99,442	2,27,770	—9,388	—0·45	77	104·12

(*g*) Satpura Railway (2′ 6″ gauge)—

This railway is the combination of three lines formerly known as the Gondia-Chanda, Jubbulpore Gondia and Nagpur-Chhindwara extensions.

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5
Gondia Chanda Extension—				
Gondia to Nagbhir	10-11-08	82·82		
Nagbhir to Rajoli	1-12-10	31·66		
Rajoli to Babupeth	1-4-13	35·34		
Babupeth to Chanda Fort	20-2-16	1·07		
Extension—			150·89	
Nagbhir to Motibagh *vid* Itwari	10-11-08	65·50		
			65·50	
Lines at Itwari	10-11-08	0·64		
Entrance to Nagpur	15-3-11	1·55		
Length taken from G. I. P. Railway at Nagpur (Itwari)	1-7-25	0·26		
Jubbulpore-Gondia Extension—	March 32	0·55		
Jubbulpore to Howbagh	15-9-05	1·38	3·00	
Howbagh to Burgi	7-4-05	16·10		
Burgi to Nainpur	5-7-04	51·47		
Nainpur to Gondia	13-4-03	72·66		
Braches and Extensions—			141·61	
Mandla branch—				
Nainpur to Garha Mandla	15-2-09	26·66		
Barkuhi branch—			26·66	
Nainpur to Seoni	12-2-04	47·37		
Seoni to Chaurai	27-7-04	19·22		
Chaurai to Chhindwara	1-9-04	20·96		
Chhindwara to Khirsadoh	15-3-06	16·14		
Khirsadoh to Barkuhi	21-3-07	5·18		
Khirsadoh to Parasia	23-12-22	0·79		
Katangi branch—			109·66	
Balaghat to Katangi	1-5-13	29·17		
Ram Rama Branch	1-11 13	6·35		
			35·52	
Nagpur-Chhindwara Extension—				
Itwari to Lodhikhera	1-1-11	39·43		
Lodhikhera to Sausar	10-5-11	7·00		
Sausar to Chhindwara	20-10-13	41·75		
Khapa Branch—			88·18	
Saoner to Khapa	1-1-11	4·70		
			4·70	
Katchidana branch	20-10-13	0·20		
			0·20	
TOTAL OPEN MILEAGE	..	..	..	625·02

3. BENGAL-NAGPUR RAILWAY SYSTEM—*concld.*

(*g*) Satpura Railway (2′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 40 and 41-lb. flat-footed steel rails laid on sâl sleepers.

Ballast.—The line is ballasted with stone and moorum, except between Seoni and Chhindwara where good black ballast has been used.

Fencing.—Only important station yards are fenced.

Curves.—The sharpest curve is of 409 feet radius.

Gradients.—The ruling gradient is 1 in 80, except between Gondia and Chanda where it is 1 in 100 and between Khirsadoh and Barkuhi where it is 1 in 60.

Contracts—

This line is an integral part of the Bengal-Nagpur railway and is worked under the contracts noted under Bengal-Nagpur railway (5′ 6″ gauge).

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

NOTE.—(i) The figures in this table are also included in the Statistics of working of the Bengal Nagpur Railway (5′ 6″ gauge)—*vide* note on the top of the table of Statistics of working of that Railway.

NOTE.—(ii) From the year 1936-37 the $\frac{\text{net earnings}}{\text{working expenses}}$ have been arrived at after taking into account the 'Appropriation to Depreciation Reserve Fund' instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Year	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	624·63	3,73,01,570	23,21,318	6,11,012	1·64	71	73·68
1914-15	621·86	3,87,20,451	21,17,243	3,90,901	1·01	65	81·54
1915-16	622·87	4,02,71,995	20,52,540	1,58,457	0·39	63	92·28
1916-17	626·26	4,00,73,512	22,08,616	3,61,479	0·90	68	83 63
1917-18	626·26	4,02,00,345	25,02,110	6,20,169	1·54	77	75·21
1918-19	626·03	3,95,07,708	27,11,296	4,94,995	1·25	83	81·74
1919-20	626·03	3,96,09,226	32,23,940	5,16,218	1·30	99	83·99
1920-21	626·03	4,02,23,203	36,19,331	5,14,706	1·28	111	85·78
1921-22	626·03	4,09,67,341	32,69,828	—1,47,184	..	100	104·50
1922-23	626·82	4,22,80,383	39,89,760	4,21,506	1·00	122	89·44
1923-24	626·82	4,25,12,065	39,80,204	4,10.988	0·97	122	89·67
1924-25	626·82	4,23,53,587	40,23,240	3,58.499	0·85	123	91·09
1925-26	627·08	4,31,63,621	38,91,097	6,21,414	1·44	119	84·03
1926-27	625·15	4,36,42,725	34,79,743	1,73,361	0 40	107	95·02
1927-28	625·15	4,37,34,897	34,78,886	—44,815	..	106	101·29
1928-29	625·15	4,39,90,433	37,36,949	2,88,920	0·66	115	92·27
1929-30	625·15	4,41,57,606	36,61,640	67,186	0·15	112	98·17
1930-31	625·15	4,43,90,378	30,24,442	—4,45,477	—1·01	93	114·73
1931-32	625·70	4,44,11,221	22,30,737	—9,68,429	—2·18	68	143·41
1932-33	625·92	4,44,27,232	23,99,530	—6,72,238	—1·51	74	128·02
1933-34	625·92	4,44,33,658	23,70,110	—7,92,550	—1·78	73	133·44
1934-35	625·92	4,44,57,232	23,40,121	—5,56,223	—1·25	72	123·77
1935-36	625·92	4,44,60,487	22,92,699	—7,93,358	—1·78	70	134·60
1936-37	625·92	4,44,99,174	22,21,654	—14,19,111	—3·19	68	163·88
1937-38	625·92	4,45,83,619	23,49,446	—14,01,595	—3·14	72	159·66
1938-39	625·92	4,46,92,218	24,48,088	—14,15,575	—3·17	75	157·82

(*h*) Tumsar-Tirodi Light railway (2′ 0″ gauge)

This line was purchased by Government from the Central India Mining Company and made over to the Bengal-Nagpur Railway Company for maintenance and working as a part of their undertaking with effect from the 1st April 1916.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total	Remarks.
Tumsar to Tirodi	1-4-16	46·80	..	*The line has been dismantled as follows :—
Main Line at Kusumba	22-5-29	0·62		
Grand Total	..	..	*47·42	28·68 miles in 1929-30 [converted to 5′ 6″ gauge *vide* entry regarding opening of 29·32 miles on 1st September 1929 against Tumsar Tirodi Broad gauge conversion in table (*a*) on page 22], 14·54 miles in 1934-35 and 4·20 miles on 15-2-36.

Details of construction—

Permanent-way.—The permanent-way consists of 24 and 18-lb. flat-footed steel rails on sleepers of wood and corrugated iron.

Ballast.—The line is ballasted partly with stone and partly with moorum.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has radius of 286·5 feet.

Gradients.—The ruling gradient is 1 in 42.

Contract—

There is no separate contract for this line which is being maintained and worked as an integral part of the Company's undertaking.

Statistics of working—

Included with the Bengal-Nagpur railway (5′ 6″ gauge).

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM.

Chairman—MAJOR A. D. G. SHELLEY, R.E.

Secretary—N. A. Lincoln, ESQ.

Offices—White Mansion, 91, Petty France, Westminster, S. W. 1.

Date of registration of the former company—1855.

The property vested in the former Bombay, Baroda and Central India Guaranteed Railway Company was purchased by the Secretary of State on the 31st December 1905, from which date all the contracts then subsisting between the Secretary of State and that Company were determined, the Company was re-constituted and the railway was worked temporarily under the terms of the provisional contract, dated the 27th December 1905, pending the execution of the new contract, dated the 8th April 1907, as from the 1st January 1906. The purchase price was fixed at the sum of £11,685,581, and the Secretary of State agreed to create and issue to the Company, on the 31st December 1905, India 3 per cent. stock to the amount of £10,089,146 in satisfaction of £9,685,581, part of the purchase price, the Company raising a new stock capital of £2,000,000 being the unpaid balance of the purchase money of £11,685,581.

In addition to its own property the Company works certain other lines owned by separate companies and Indian States, one of which, *viz.*, the Ahmedabad-Dholka railway, has been purchased by Government and merged in the metre gauge section of the Company's line with effect from the 1st July 1922.

Lines comprised in the system.—The Bombay, Baroda and Central India railway system is made up of—

	Open line	Under construction or sanctioned for construction.	Total.
	Miles	Miles.	Miles.
(*a*) Bombay, Baroda and Central India railway (5′ 6″ gauge)	1,035·30	..	1,035·30
(*b*) Nagda-Ujjain railway (5′ 6″ gauge)	34·79	..	34·79
(*c*) Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)	21·42	..	21·42
(*d*) Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)	12·35	..	12·35
(*e*) Tapti Valley railway (5′ 6″ gauge)	155·72	..	155·72
(*f*) Bombay, Baroda and Central India railway (3′ 3⅜″ gauge)	1,878·94	..	1,878·94
(*g* Ahmedabad-Parantij railway (3′ 3⅜″ gauge)	88·73	..	88·73
(*h*) Dhrangadra railway (3′ 3⅜″ gauge)	40·28	..	40·28
(*i*) Palanpur State railway (3′ 3⅜″ gauge	17·11	..	17·11
(*j*) Bombay, Baroda and Central India railway (2′ 6″ gauge)	72·28	..	72·28
(*k*) Guzerat Champaner-Shivrajpur-Pani Light railway (2′ 6″ gauge)	30·68	..	30·68
(*l*) Guzerat Godhra-Lunavada railway (2′ 6″ gauge)	25·49	..	25·49
(*m*) Guzerat Nadiad-Kapadvanj railway (2′ 6″ gauge	28·18	..	28·18
(*n*) Piplod Devgad Baria railway (2′ 6″ gauge)	9·52	..	9·52
(*o*) Rajpipla State railway (2′ 6″ gauge)	58·37	..	58·37
Total	3,509·16	..	3,509·16

Running powers—

Home line over foreign lines :—

Broad Gauge—			
Dadar Junction to Carnac bridge, Great Indian Peninsula Railway (for goods trains only)			4·24
Mahim to Vadala, Great Indian Peninsula Railway (for passengers and goods trains)			1·23
Muttra to Okhla	Great Indian Peninsula Railway	(for passengers and goods trains)†	82·925
Okhla to Delhi	North Western Railway		7·50
Agra Cantonment to Agra Bayana Spur Line, Great Indian Peninsula Railway (for goods trains only)			0·72
Wadala to Bellard Pier, Bombay Port Trust Railway (for passenger and mail trains only)			7·00
Metre Gauge—			
Mehsana to Viramgaon, Gaekwar Baroda State Railway (for goods trains only)*			39·09
Fatehpur Junction Cabin to Belanganj, Great Indian Peninsula Railway (for goods trains only)			3·03
Cawnpore Anwarganj to Cawnpore Central, East Indian Railway. (For coaching traffic only)			1·37
		Total	147·105

Foreign lines over home line :—

Broad Gauge—	
East Indian Railway, Agra East Bank to Idgah Agra (for passenger trains only)	3·035
East Indian Railway, Agra East Bank to Rupbas (for ballast trains only)	32·553
Great Indian Peninsula Railway, Mahim to Bandra (for passenger and ballst trains only)	1·48
North-Western Railway, Delhi Ballast Siding Cabin to Delhi Cantonment Station (for coaching and goods traffic)	5·686
Metre Gauge—	
Jaipur State Railway, Jaipur to Sanganer (for passenger and goods trains)	7·34
Udaipur Chittorgarh Railway, Chitorgarh to Berach Signal Station (for passenger and goods trains)	1·44
Total	51·534

*These powers are temporarily exercised since 1st April 1933, and are subject to revision at the end of 1938-39.

†On and from the 1st November 1930, the Bombay, Baroda and Central India Railway ceased to run their goods trains beyond Muttra.

B. B & C. I. RAILWAY SYSTEM.

REFERENCES.

	5'-6"	3'-3 3/8"	2'-6" & 2'-0"
B. B & C. I. Railway	▬▬	▬▬	▬▬
Indian State lines	▬▬	▬▬	▬▬
Private Companies' lines	▬▬	▬▬	▬▬
Home, Branch and Local line Junctions	⊕	⊕	⊕
Junctions connecting Foreign lines	◉	◉	◉

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.

KOT KAPURA
BHATINDA
FAZILKA
FARUKHNAGAR
HISSAR
DELHI
GARHI-HARSARU
REWARI
BRINDABAN
MUTTRA
BHARATPUR
KASGANJ
HATHRAS
MUTTRA CANT
ACHNERA
AGRA FORT
FARUKHABAD
BRAHMAVART
MANDHANA
CAWNPORE
BANDIKUI
JAIPUR
SANGANER
BAYANA
REENGUS
SAMBHAR LAKE
KUCHAMAN RD
PHULERA
AJMER
SAWAI MADHOPUR
KOTAH
MARWAR JN.
CHITORGARH
NAGDA
UJJAIN
FATEHABAD-CHANDRAWATIGANJ
RATLAM
KHANDWA
MEHSANA
KHED-BRAHMA
AMBLIYASAN
SABARMATI
AHMEDABAD
NADIAD
KAPADVANJ
BORIAVI
TIMBA ROAD
LUNAVADA
GODHRA
PALANPUR
DEESA
KALOL
PIPLOD
DEVGAD BARIA
PANI MINES
CHAMPANER RD.
KHARAGHODA
VIRAMGAM
KUDA SIDING
HALVAD
DHRANGADRA
WADHWAN
DHANDHUKA
VADTAL
CAMBAY
BANDAR
KAVI
ANAND
JAMBUSAR
SAMNI
DAHEJ
ANKLESVAR
KOSAMBA
SAMLAYA
BARODA
VISHVAMITRI
MIYAGAM
RAJPIPLA
JHAGADIA
NETRANG
BROACH
AMALNER
UDHNA
BILIMORA
DADAR
BOMBAY (CENTRAL)
N

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*a*) Bombay, Baroda and Central India railway (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Church Gate to Marine lines	18-1-70	0·78		
Marine lines to Charni Road	19-6-69	0·75		
Charni Road to Grant Road	3-9-68	0·76		
Grant Road to Bulsár	28-11-64	121·5[illegible]		
Bulsár to Navsári	2-9-61	24·25		
Navsári to Sachin	20-5-61	9·25		
Sachin to Surat	18-3-61	9·00		
Surat to Utran	19-11-60	2·25		
Utran to Anklesvar	10-2-60	28·75		
Anklesvar to Nerbudda	5-12-60	5·57		
Nerbudda to Broach	22-6-60			
Broach to Baroda	9-1-61	43·75		
Baroda to Vasad	22-4-62	11·23		
Vasad to Mehmadabad and Kaira Road	3-9-62	33·25		
Mehmadabad and Kaira Road to Ahmedabad	21-1-63	17·89		
Ahmedabad to Sábarmati	1-1-70	3·75		
Sábarmati to Sánand	24-5-71	13·75		
Sánand to Viramgám	30-11-71	22·98		
			349·48	
Branches and section—				
Godhra branch—				
Anand to Dâkor	8-4-74	16·75		
Dákor to Rukhyal	6-1-75	1·75		
Rukhyal to Angadi	6-12-76	9·00		
Angadi to Sevalia	29-1-77	4·71		
Sevalia to Godhra	26-2-82	16·74		
			48·95	
Pátri branch—				
Khárághoda to Viramgam	12-5-73	22·12		
			22·12	
Godhra-Baroda chord—				
Baroda to Godhra	23-12-03	42·37		
			42·37	
Godhra-Rutlam-Nagda section—				
Godhra to Limkhera	16-1-93	25·86		
Limkhera to Dohad	7-3-94	19·55		
Dohad to Rutlam	22-10-94	70·46		
Rutlam to Nagda	11-5-96	26·04		
			141·91	
Nagda-Muttra section—				
Nágdá to Morak	15-7-07	101·56		
Morak to Kotah City	26-2-08	35·12		
Kotah City to Kotah Junction	1-5-09	3·48		
Kotah Junction to Siwai Mádhopur	1-5-09	67·38		
Siwai Mádhopur to Gangapur City	1-6-09	39·00		
Gangapur City to Hindaun City	1-10-09	26·34		
Hindaun City to Muttra Junction	15-6-09	66·02		
			339·40	
Agra branch—				
Bayana to Agra	1-12-13	50·30		
Agra East Bank to Idgah, Agra	1-1-76	4·00		
			54·30	
Mahim Chord Line in Mahim yard	11-8-14	0·10		
Line in Kotah yard	..	1·00		
At Delhi (worked by Great Indian Peninsula Railway)	12-11-03	0·11		
Delhi Cantonment extension (worked by North Western Railway).	22-6-15	*5·24		
			6·45	
Vasad Katana Railway—				
Vasad to Katana	1-9-30	26·61	26·61	
Boriavi Vadtal Railway—				
Boriavi to Vadtal	18-4-29	3·71	3·71	
TOTAL OPEN MILEAGE	..	..	..	1,035·30
QUADRUPLE LINE—				
Grant Road to Bellasis Road	17-10-26	0·09		
Bellasis Road to Mahaluxmi	31-10-26	1·19		
Mahaluxmi to Parel	26-9-26	0·93		
„ „	3-10-26	0·51		
North of Borivli Station	13-3-27	0·14		
Parel to Mahim	1-3-22	2·82		
Mahim to Bandra	1-5-17	1·00		
Bandra to Santa Cruz	2-3-26	1·82		
Santa Cruz to Andheri	29-1-26	3·00		
Andheri to Goregaon	5-3-26	3·00		
Goregaon to Borivli	19-2-26	4·68		
			19·18	
Triplicate lines at Grant Road	27-1-27	0·26		
			0·26	

*Worked for goods and troop traffic only.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*a*) Bombay, Baroda and Central India railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Section of railways.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
DOUBLE LINE—				
Church Gate to Marine lines	18-1-70	0·78		
Marine lines to Charni Road	19-6-69	0·75		
Charni Road to Grant Road	13-9-68	0·73		
Bombay Central yard	18-12-30	0·51		
Borivli to Bháyndar	27-4-85	4·72		
Bháyndar to Virár	1-10-85	10·34		
Virár to Pálghar	1-12-97	19·28		
Pálghar to Dáhánu Road	17-1-98	20·37		
Dahánu Road to Gholvad	20-4-00	6·89		
Gholvad to Daman Road	18-10-00	23·19		
Daman Road to Bulsár	29-1-02	16·44		
Bulsár to Sachin	21-4-02	33·50		
Sachin to Kankra Khári Udhna	4-7-87	6·30		
Kankra Khári Udhna to Surat	5-6-68	2·70		
Surat to Utran	9-10-67	2·15		
Utran to Sáyan	25-5-98	6·40		
Sáyan to Kim	1-10-98	6·30		
Kim to Anklesvar	11-12-99	16·15		
Anklesvar to Silver Jubilee Bridge	7-2-13	4·17		
Silver Jubilee Bridge to Broach	20-12-35	1·23		
Broach to Miyágám	15-10-99	25·25		
Miyágám to Itola	15-9-97	7·75		
Itola to Baroda "C" cabin	7-6-95	12·07		
Baroda "C" cabin to "D" cabin	10-4-16	1·79		
Bárejadi to Ahmedabad	2-6-87	10·95		
At Delhi	27-2-05	0·11		
TOTAL DOUBLE LINE		..	240·82	

Details of construction—

Permanent-way.—The main line is laid with 82-lb. bull-headed and 90-lb. flat-footed steel rails on deodar, jarrah, sâl, oval pot and steel trough sleepers.

The branches are laid with 69-lb. double-headed, 70-lb. and 75-lb. flat-footed and 82-lb. bull headed steel rails on oval pot, wooden and steel trough sleepers. The Godhra-Rutlam-Nagda section is laid with 90-lb. flat-footed steel rails on transverse steel and cast iron pots and the Nagda-Muttra section with 87-lb. and 90-lb. flat-footed steel rails on sál, deodar, Australian, jarrah, cast iron and steel trough sleepers.

Ballast.—The line is mostly ballasted with broken stone, gravel and shingle.

Fencing.—Excepting the Pátri branch the Boriavi-Vadtal branch and Vasad Katana branch the line is fenced throughout. One hundred and thirty-seven miles of the Godhra-Rutlam-Nagda section and the station yards only on the rest of this section are fenced. On the Nagda-Muttra section most of the station yards only are fenced.

Curves.—The sharpest curve on the main line and on the Godhra branch is of 1,500 feet radius, on the Pátri branch of 2,865 feet radius, on the Baroda-Godhra chord of 1,910 feet radius, on the Godhra-Retlam-Nagda section of 1,000 feet radius, on the Nagda-Muttra section of 1,273 feet radius on Boriavi Vadtal branch of 1,432 feet radius and on the Vasad Katana branch of 1,146 feet radius.

Gradients.—The ruling gradient on the greater part of the main line is 1 in 500, but there are short lengths of 1 in 200 at the approaches to major bridges. On the Anand-Godhra branch the ruling gradient is 1 in 200, except for a short length at the Mahi low level bridge where it is 1 in 80; on the Pátri branch and the Baroda-Godhra chord it is 1 in 300, except for short lengths of 1 in 200 on the latter. The ruling gradient on the Nagda-Muttra section is 1 in 200, as also on the Godhra-Rutlam-Nagda section with short lengths of 1 in 100 and from 1 in 101 to 1 in 150 between Godhra and Jekot. The ruling gradient on the Boriavi Vadtal branch is 1 in 250 and on the Vasad Katana is 1 in 400.

Contracts—

Dated the 8th April 1907 (called the principal contract), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the maintenance, management and working as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Dated the 15th October 1908 (called the Debenture contract, supplemental to the contract of 1907), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the issue of debentures or debenture stock of the Company.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*a*) Bombay, Baroda and Central India railway (5′ 6″ gauge)—*contd.*

Contracts—*concld.*

Dated the 24th October 1913 (supplemental to the contracts of 1907 and 1908), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the continuance with further modifications, with effect from the 1st January 1912, of the principal contract of the 8th April 1907 and the adoption of the Government financial year for the preparation of accounts.

Dated the 19th November 1923 (supplemental to the contracts of 1907 and 1913), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to compiling Accounts and Statistics annually instead of half-yearly and as to rate of exchange.

Dated the 6th March 1924 (supplemental to the contracts quoted above) *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the working by the Company of the Ahmedabad-Dholka railway purchased by Government with effect from the 30th June 1922.

Dated the 25th April 1929 (supplemental to the contracts quoted above) between the Secretary of State and the Bombay, Baroda and Central India Railway, as to the rate of exchange.

Dated the 13th May 1929 (supplemental to the contracts quoted above) between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the construction and working of Dholka Dhanduka, Jambusar Kavi, Samni-Dehej, Boriavi-Vadtal and Vasad Katana Branch Railways.

Dated the 7th July 1930 (supplemental to the contract of 8th April 1907) between the Secretary of State and the Bombay Baroda and Central India Railway Company, as to the control of the Dharangadhra Railway by the Railway Board.

Dated the 5th October 1933 (supplemental to the contracts quoted above) between the Secretary of State and the Bombay, Baroda and Central India Railway Company, as to the conversion of Rs. 10 crores of the preferred capital of the Secretary of State into capital bearing fixed interest at 4½ per cent.

Dated the 6th January 1937 (supplemental to the contracts quoted above), between the Secretary of State and the Bombay, Baroda and Central India Railway Company as to the fixing of the amount of rent payable by the Postal Department of the Government of India.

Main provisions of contracts—

(i) *Land.*—Was provided by the Government free of cost to the former Company. After the 31st December 1905, the cost of land provided by the Government is debited to the appropriate capital account.

(ii) *Government aid.*—The Government guarantee to pay to the Company interest at the rate of 3 per cent. per annum on its stock capital of £2,000,000 raised in satisfaction of the unpaid balance of the purchase money of £11,685,581, also on the amount which shall for the time being have been paid to the credit of the Secretary of State in respect of any further ordinary stock which the Company may issue with his sanction.

Capital required for the purposes of the undertaking after 31st December 1911 shall, at the option of the Secretary of State, either be advanced by him (in which case he shall be at liberty to call on the Company subsequently to raise money for its repayment), or be provided by the Company by the issue, as the Secretary of State shall decide, of further ordinary stock, or of debentures or debenture stock.

(iii) *Distribution of profits.*—From the half-yearly gross earnings of the undertaking are deducted the working expenses of the undertaking and all other charges to Revenue account properly attributable to each half-year, the remainder, together with the interest to be credited by the Secretary of State in respect of any balance of unexpended capital in his hands under clause 19 of the contract of the 24th October 1913, being the net receipts.

The net receipts of the undertaking for each half-year, after deducting payments of net earnings to subsidiary lines, allowances for rebate, direction and other deductions are applied in repayment of interest for the half-year on any debentures or debenture stock of the Company and on the Secretary of State's Capital of Rs. 10 crores bearing fixed interest at the rate of 4½ per cent. per annum and in payment to the Secretary of State and the Company of interest at 4 per cent. per annum on the Secretary of State's preferred capital and on the average amount to the credit of the Company's Capital Account. Next in making good any deficiency in the net receipts of the first half-year of any year as compared to the payment chargeable thereon and mentioned above

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—contd.

(*a*) Bombay, Baroda and Central India railway—contd.

Main provisions of contracts—*contd.*

The surplus of the two half-years of any year is next applied in payment of interest for the year at 4 per cent. on the deferred capital of the Secretary of State and the balance, if any, remaining is divided between the Secretary of State and the Company in proportion to the average amounts standing to the credit of the Secretary of State and the Company, respectively, in the Government Capital Account and the Company's Capital Account, including in the Secretary of State's Capital both his preferred and deferred capital. The interest payable by the Secretary of State under the guarantee of 3 per cent. is to be deducted from the interest at 4 per cent. per annum payable to the Company on the average amount to the credit of the Company's Capital Account.

(iv) *Rates and fares.*—The Government will from time to time authorize maxima and minima rates, and prescribe the several classes and descriptions of passengers and goods to which such rates shall be respectively applicable, as well as the extent to which, within the authorized maxima and minima, the Company may vary the said rates. The Railway Board may at any time require the Company to quote such rates over the undertaking for both passengers and goods to and from the western ports between Karachi and Bombay, inclusive, including a rate from stations of origin and delivery where the route is either entirely or only partly over the undertaking, so as to secure equal treatment of such ports.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, high Government officials and Government stores.—To be conveyed on the same general conditions, and at rates to be approved by he Government not being less than those in force on State railways of the same gauge

(*b*) Government bullion and coin, and the persons in charge thereof.—To be carried at special rate to be approved by the Government.

(vi) *Power of the Government to determine contract.*—Contract may be determined by Government on the 31st December 1941, or on the 31st December of any succeeding fifth year, by giving to the Company in England, 12 calendar months' previous notice. On termination of the Contract the Company are to hand over to the Government the railway and its belongings of every description and the Government are to pay to the Company in Sterling in London the equivalent at par of the Capital Stock of the Company.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vii) *and* (viii)].—Not specified.

NOTE 1.—The Nadga-Muttra Railway which was constructed partly from Government funds and partly from funds received from the Jaipur Durbar, is being worked and managed by the B. B. and C. I. Railway Company as an integral part of the B. B. and C. I. Railway system. The terms between the Government of India and the Jaipur Durbar for the Durbar's contribution towards the cost of the Nagda-Muttra Railway and for maintenance, working and the distribution of the net earnings of the Railway are as under:—

(*i*) The Jaipur Durbar provided Rs. 85-lakhs, the cost of the Jaipur section of the Nagda-Muttra Railway. The cost of the remaining length as well as future capital required for the entire line to be provided by the Government of India.

(*ii*) The whole capital outlay of the Nagda-Muttra Railway to be that on works (excluding rolling stock) between Nagda and Muttra excluding junction arrangements and the cost of the Bayana-Agra Chord Railway.

(*iii*) The investment made by the Durbar to be regarded as permanent. The Durbar have no right to part with its interests in the line except to the Government of India.

(*iv*) The Government of India are under no obligation to purchase the Durbar's interests in the line. If the Durbar wishes to sell its interests and the Government of India agree to buy, the price shall be 25 times the average net annual profits received by the Durbar during the three preceding years.

(*v*) The working expenses to be the amount calculated on the same percentage of working expenses as obtains on the B. B. and C. I. Railway, Broad Guage System or 50 per cent. of the gross earnings whichever is less plus 5 per cent. of the gross earnings for the supply of rolling stock. The gross earnings to be the actual of the N. M. Section except for interchanged traffic which will be apportioned on the mileage basis and included in the actuals. The net earnings to be divided between the Government of India and the Jaipur Durbar in the proportions of the capital provided by them.

NOTE 2.—Under the agreement dated the 28th April 1870, H. H. the Maharaja Tukojirao Holkar advanced a loan of one crore of rupees (since reduced to seventy lacs) for the construction of the line from Khandwa to Indore. The main conditions are:—

(1) The line to be called the Holkar State Railway.

(2) The whole of the arrangements as to the construction and equipment as well as management after the line is opened, to be exclusively in the hands of the Government of India.

(3) The loan to be for 101 years.

(4) Government of India to pay half yearly at Indore to H. H. the Maharaja of Holkar, his heirs or successors, guaranteed interest @ 4½% per annum, free of income tax. In addition to this the Government of India pay 7/20 of the net profits (in excess of 4½% on the capital) from the earnings of the line for which separate Capital and Revenue accounts will be maintained.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*a*) Bombay, Baroda and Central India railway (5′ 6″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1906 will be found in Appendix 38 of the Railway Administration Report for 1907.)

NOTE 1.—The amount of sterling liabilities involved in the purchase of railways, included in the figures shown in column 3 against 1933-34 and 1934-35, has been converted at the rates of exchange ruling at the time when the liabilities came into being, as against the statutory rate of exchange, *i.e.*, 1*s.*-6*d* previously adopted. From the year 1935-36 onwards the same amount has been reconverted at the latter rate.

NOTE 2.—From the year 1936-37 the net earnings/working expenses have been arrived at after taking into account the ' Appropriation to Depreciation Reserve Fund ' instead of actual expenditure on ' Replacement and Renewals ' previously accounted for.

INCLUDES THE GODHRA-RUTLAM-NAGDA AND NAGDA-MUTTRA SECTIONS FROM 1912.

Year.	Mileage open at end of each year.	Total capital outlay including suspense to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction. †	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay or capital at charge, given in column 3.	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Percentage of Company's share of net earnings (surplus profits *plus* guaranteed interest on share capital) on Company's capital.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Mec.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	
1906	504·35	12,63,16,478	1,99,81,754	1,05,39,688	8·34	72,58,353	3,95.833	..	+28,85,502	809	47·27
1907	504·35	12,96,92,431	2,10,78,442	1,18,80,851	9·16	71,98,558	4,52,599	..	+42,29,694	852	43·48
1908	504·35	13,48,94,409	2,04,49,999	97,63,713	7·24	72,93,726	1,50,000	..	+23,19,987	780	52·25
1909	504·35	14,18,69,493	2,21,36,727	1,17,56,514	8·29	75,19,552	1,52,517	..	+40,84,445	844	46·89
1910	504·35	14,32,24,042	2,40,62,075	1,24,94,573	8·72	77,49,590	4,30,787	..	+43,14,196	917	48·07
1911	504·35	14,92,98,743	2,47,34,178	1,23,48,704	8·27	78,64,428	4,42,388	4·47	+40,41,888	943	50·37
1912	945·85	21,95,74 123	3,27,92,584	1,61,93,680	7·38	99,59,957	6,58,709	5·19	+55,75,014	667	50·62
1st qr. of 1913	945·85	22,35,94,288	88,37,064	46,83,922	2·09	25,74,807	2,22,340	1·47	+18,86,775	719	47.00
1913-14	996·25	23,56,10,282	3,60,67,963	1,83,83,393	7·80	4,10,96,208	5,41,271	5·19	+67,45,914	721	49·01
1914-15	996·30	24,41,98,233	3,41,76,399	1,65,02,921	6·76	1,13,83,504	5,36,456	4·57	+45,82,961	660	51·71
1915-16	996·05	24,97,72,110	3,73,18,037	1,96,00,894	7·85	1,15,64,030	9,10,326	5·66	+71,26,538	721	47·48
1916-17	997·12	25,18,41,949	3,96,80,614	2,33.71,683	9·28	1,14,51,232	11,05,194	6·26	+1 08,15,257	765	41·10
1917-18	997·12	25,54,66,064	4,56,08,423	2.58,92,489	10·14	1,13,34,814	12,70,777	6·78	+1,32,86,898	880	42·23
1918-19	997·09	25,66,22,869	5,25,46.372	2,97,32,879	11·59	1,14,02,413	16,67,100	7·94	+1.66,83,366	1,013	43·42
1919-20	997·09	26,55.06,868	5,31,15,062	2,48,01,298	9·34	1,16,78,971	13,27,190	6·28	+1,17,95,137	1,024	53·31
1920-21	1,008·39	‡32,01,06,283	5,67,91,424	1,83,23,641	5·72	1,04,72,354	8,35,120	4·63	+70,16,167	1,092	67·74
1921-22	1,008·24	‡33,53,66,730	5,82,82,749	1,21,85,973	3·64	1,31,97,641	4,24,668	4·00	—14,36.336	1,112	79·09
1922-23	1,008·24	‡35,61,55,344	6,71,22,758	1,70,48,879	4·78	1,40,70,711	6,19,816	4·79	+23,58,352	1,280	74·60
1923-24	1,008·24	‡ 43,38,38,468	6,86,45,550	2,65,22,463	6·11	1,47,73,607	11,70,026	6·39	+1,05,78,830	1,309	61·36
1924-25	1,008·26	‡45,07,69,678	6,77,36,548	2,79,34,844	6·20	1,50,91,923	14,85,347	7·21	+1,13,57,574	1,292	58·76
1925-26	1,006·16	‡46,39,65,366	6,96,75,493	2,46,70,843	5·32	1,58,07,771	11,01,705	5·93	+77,61,367	1,332	64·59
1926-27	1,006·11	‡47,77,46,838	6,12,01,501	2,04,31,977	4·28	1,63,72,093	8,44,967	5·15	+32,14,917	1,170	66·62
1927-28	1,006·11	‡49,79 73,410	6,42,73,532	2,33,33,995	4·69	1,72,26,643	8,72,755	5·23	+52,34,596	1,229	63·70
1928-29	1,006·11	‡50,44,15,871	6,71,08,979	2,78,27,430	5·52	1,82,55,259	10,82,323	5·89	+84,89,848	1,283	58·53
1929-30	1,009·82	‡51,47,55,228	6,41,56,610	2,33,71,742	4·54	1,81,69,433	8,65,469	5·20	+43,36,840	1,222	63·57
1930-31	1,035·40	‡50,00,24,363	5,86,81,734	1,83,88,286	3·68	1,93,67,967	5,48,018	4·21	—15,27,699	1,090	68·66
1931-32	1,035·29	‡50,23,80,923	5,81,72,377	2,34,28,948	4·66	1,96,66,419	6,79,916	4·62	+30,82,613	1,080	59·72
1932-33	1,035·30	‡50,63,72,043	5,80,71,416	2,44,04,338	4·82	1,95,86,931	7,65,327	4·89	+40,52,080	1,178	57·97
1933-34	1,035·30	‡52,81,81,174	6,14,32,387	2,85,81,405	5·41	1,95,09,733	9,74,793	5·54	+80,96,879	1,141	53·47
1934-35	1,035·30	‡53,02,33,056	6,25,84,545	2,46,74,388	4·65	1.92,13,176	9,03,145	5·32	+45,58,067	1,162	60·57
1935-36	1,035·30	‡50,79,03,038	6,38,86,220	2,84,85,596	5·61	1,90,53,088	10,44,700	5·76	+83,87,808	1,187	55·41
1936-37	1,035·30	‡50,78,23,630	6,78,87,062	2,82,39,181	5·56	1,87,09,155	13,00,750	6·56	+82,29,276	1,261	58·26
1937-38	1,035·30	‡50,75,43,544	6,75,34,926	2,68,88,316	5·30	1,85,80,960	12,16,065	6·30	+70,91,291	1,254	60·19
1938-39	1,035·30	‡50,83,96,963	6,76,09,709	2,71,24,053	5·34	1,84,91,992	§12,26,577	6·33	+74,05,484	1,256	59·88

† From 1923-24 the figures in this column represent the total capital at charge, including liabilities involved in the purchase of the line, converted at different rates from time to time.

‡ Including premia paid by Government in the purchase of the line.

§ This figure relates to the entire undertaking of the company. It is made up of Rs. 7,46,177 as surplus profits and the excess of Rs. 4,80,400, of interest at 4 per cent. per annum on the Company's preferred capital over the guaranteed interest at 3 per cent. paid to the Company by the Secretary of State. This figure is inclusive of interest at 4 per cent. and a moiety of surplus profits amounting to Rs. 1,03,827 due to Government on the advance of Rs. 20,10,000 from the 5′ 6″ gauge Provident Fund taken over by them. The surplus profits for the year were divided between the Government and the Company in the proportion of Rs. 75,14 39,303 to Rs 3,20,10,000. Similar notes giving details of the figures for the previous years will be found in the History of each year.

(*b*) Nagda-Ujjain Railway (5′ 6″ gauge)—

Progress in opening—

Section of railway	Date of opening.	Miles.	Total.
1	2	3	4
Nagda to Ujjain	15-7-96	34·79	34·79

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on cast iron oval pot sleepers.

Ballast.—The line is ballasted with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 200.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*b*) **Nagda-Ujjain railway** (5′ 6″ gauge)—*concld.*

Agreement and contracts—

Agreement, without date, having effect from the 15th July 1896, *between His Highness the Maharaja Scindia of Gwalior and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working.

Contract, dated the 1st February 1901, *between the Secretary of State and th Bombay, Baroda and Central India Railway Company*, as to the revising, and extending up to the 31st December 1905, of the arrangements for working the Rajputana Malwa railway and other lines.

Contract, dated the 8th April 1907 (called the principal contract), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Main provisions of agreement and contracts—

(i) *Land.*—Provided free of cost by the Gwalior Durbar.

(ii) *Government aid.*—The line is the property of the Gwalior Durbar (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the Company's railway system.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The Nagda-Ujjain railway is debited with a share of the working expenses of the Company's railway system in proportion to the total earnings of the Nagda-Ujjain railway in each half-year, and the balance in favour of, or against, the Gwalior Durbar is paid over to it, or by it, as the case may be, the payment for the first-half year being subject to adjustment at the close of the year.

(v) *Rates and fares.*—To conform generally to those in force on the Godhra-Rutlam-Nagda railway unless otherwise specially agreed between the Durbar and the Company.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, high Government officials and Government stores.—Mails and postal officers on duty to be carried at the rates and on the conditions in force from time to time on State railways. (The agreement does not contain any provision for the carriage at special rates of troops, high Government officials and Government stores.)

(*b*) Government bullion and coin, and the persons in charge thereof.—Not specified.

(vii) *Power of the Durbar to determine agreement.*—
(viii) *Power of the Company to determine agreement.*— } The agreement may be terminated at any time on one year's notice from either party, expiring on the 31st March in any year.

(ix) *Terms of agreement* [*if not determined under* (vii) *and* (viii)].—Not specified.

Statistics of working (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	34·32	22,42,194	2,26,870	1,65,627	7·39	183	49·33
1914-15	34·32	22,50,028	2,58,462	1,22,968	5·47	145	52 42
1915-16	34·32	22,53,063	3,48,441	1,86,781	8·29	195	46·40
1916-17	32·51	22,55,464	2,86,516	1,62,977	7·23	169	43·12
1917-18	32·51	22,55,464	2,61,688	1,46,039	6·47	155	44·19
1918-19	32·51	22,55,464	3,99,100	2,18,397	9·68	236	45·28
1919-20	32·51	22,55,672	4,62,899	2,06,822	9·17	274	55·32
1920-21	32·51	22,55,672	3,76,870	1,22,976	5·45	223	67·37
1921-22	32·51	22,55,672	4,44,734	1,07,003	4·74	263	75·94
1922 23	32·51	22,55,672	4,64,641	1,41,671	6·28	275	69·51
1923-24	32·51	22,55,672	4,14,582	1,68,416	7·47	245	59·38
1924-25	32·51	22,55,672	4,80,549	2,04,714	9·08	284	57·40
1925-26	34·61	22,55,672	5,40,176	2,09,210	9·27	300	61·27
1926-27	34·61	22,55,672	4,89,054	1,81,927	8·06	273	62·80
1927-28	34·61	22,58,522	4,92,189	1,87,372	8·30	274	61·93
1928-29	34·61	22,58,649	5,34,222	2,26,304	10·02	297	57·64
1929-30	34·61	22,60,378	5,92,540	2,29,998	10·18	329	61·18
1930-31	34·79	22,67,437	5,92,504	2,05,549	9·06	327	65·31
1931-32	34·79	22,71,024	5,16,056	2,05,895	9·06	285	60·10
1932-33	34·79	22,71,021	5,45,715	2,32,590	10·24	302	57·38
1933-34	34·79	22,72,664	6,83,439	3,07,989	13·55	378	54·94
1934-35	34·79	22,72,715	6,75,156	2,84,375	12·51	373	57·88
1935-36	34·79	22,80,829	7,11,652	3,17,472	13·92	393	55·39
1936-37	34·79	22,83,817	7,53,747	3,57,648	15·66	417	52·55
1937-38	34·79	22,78,708	7,92,873	3,57,365	15·68	438	54·93
1938-39	34·79	22,80,613	7,69,511	3,50,047	15·35	425	54·51

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(c) Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Anand to Petlád	5-5-90	13·17	
Petlád to Tarapur	20-6-01	8·25	
TOTAL	..	..	21·42

Details of construction—

Permanent-way.—The permanent-way consists of second hand 82-lb. steel rails on C. I. pot sleepers.

Ballast.—The line is ballasted with gravel.

Fencing.—Thirteen miles, between Anand and Petlád, are fenced. The rest of the line is unfenced except in station yards.

Curves.—The sharpest curve is of 1,220 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Agreements and contract—

Agreement, without date, having effect from the 5th May 1890, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working.

Contract, dated the 8th April 1907 (called the principal contract), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company* as to the maintenance, management and working, as from 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Agreement, dated the 3rd March 1909, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, modifying the agreement of 5th May 1890.

Agreement, dated the 16th May 1910, *between the Government of His Highness the Maharaja Gaekwar of Baroda and the Bombay, Baroda and Central India Railway Company*, modifying further the agreement of 5th May 1890.

Main provisions of agreements and contract—

(i) *Land.*—Provided free of cost by the Baroda Durbar.

(ii) *Government aid.*—The line is the property of the Baroda Durbar (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Bombay Baroda and Central India Railway Company as part of the Company's railway system.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— Excepting the cost of making good damages due to extraordinary casualty which is borne by the Durbar and is chargeable against capital, the Petlad railway is debited for maintenance and working expenses, including the cost of supervision and hire of rolling-stock, with the same percentage of gross earnings as may be incurred in the half-year on the 5′ 6″, 3′ 3⅜″ and 2′ 6″ gauge lines of the Bombay, Baroda and Central India railway system, and with any single item of capital expenditure not exceeding Rs. 1,000 classed as a 'Minor work,' subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtains for similar expenditure on the Bombay, Baroda and Central India Railway. The balance in favour of, or against, the Baroda Durbar is paid over to it, or by it, as the case may be, the payment for the first-half year being subject to adjustment at the close of the year.

(v) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Durbar but in the absence of any special agreement between them, they are, as far as may be, to conform to those generally in force on the Bombay, Baroda and Central India railway (5′ 6″ gauge).

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, high Government officials and Government stores.—Mails and postal officers on duty to be carried at the rates and on the conditions in force from time to time on State railways in British India. (There is no provision for the carriage at special rates of troops, high Government officials and Government stores.)

(*b*) Government bullion and coin, and the persons in charge thereof.—Not specified.

(vii) *Power of the Durbar to determine agreement.*—
(viii) *Power of the Company to determine agreement.*— Either party may at any time determine the agreement on giving 12 months' notice to the other.

(ix) *Term of agreement* [*if not determined under* (vii) *and* (viii)].—Not specified.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(c) Petlad-Cambay railway (Anand-Tarapur section) (5′ 6″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction. (*a*)	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	21·50	11,50,073	2,43,277	1,21,880	10·60	218	49·90
1914-15	21·50	12,02,487	2,61,224	1,24,590	10·35	234	52·34
1915-16	21·50	12,62,474	2,78,833	1,45,392	11·52	249	47·89
1916-17	21·42	12,76,018	2,81,393	1,61,221	12·83	253	42·71
1917-18	21·42	12,84,150	2,74,851	1,53,583	11·96	247	44·12
1918-19	21 42	12,83,248	3,37,623	1,87,330	14·60	303	44·52
1919-20	21·42	13,06,595	3,53,358	1,58,011	12·09	317	55·28
1920-21	21·42	13,06,643	3,91,439	1,27,731	9·78	351	67·37
1921-22	21·42	13,27,975	3,94,011	94,800	7·14	354	75·94
1922-23	21·42	13,76,342	4,60,009	1,40,259	10·19	413	69·51
1923-24	21·42	13,85,339	4,97,767	2,02,209	14·60	447	59·38
1924-25	21·42	13,91,132	5,21,125	2,21,999	15·96	468	57·40
1925-26	21·42	13,97,973	5,27,103	2,04,147	14·60	473	61·27
1926-27	21·42	14,01,385	5,07,523	1,88,798	13·47	456	62·80
1927-28	21·42	14,04,683	5,17,073	1,96,845	14·01	464	61·93
1928-29	21·42	14,06,415	5,31,412	2,25,113	16·01	477	57·64
1929-30	21·42	14,17,635	5,22,520	2,02,819	14·31	469	61·18
1930-31	21·42	14,44,130	4,85,869	1,68,556	11·67	432	65·31
1931-32	21·42	14,44,521	4,21,599	1,68,208	11·64	379	60·10
1932-33	21·42	14,46,044	4,43,314	1,88,945	13·07	398	57·38
1933-34	21·42	14,49,143	4,44,320	2,00,231	13·81	399	54·94
1934-35	21·42	14,55,727	4,21,430	1,77,506	12·19	378	57·88
1935-36	21·42	14,60,578	4,21,531	1,88,048	12·87	378	55·39
1936-37	21·42	14,60,734	4,41,696	2,09,582	14·35	397	52·55
1937-38	21·42	14,60,733	4,59,754	2,07,221	14·19	413	54·93
1938-39	21·42	14,60,733	4,40,329	2,00,303	13·71	395	54·51

(d) Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tarapur to Cambay	20-6-01	12·35	12·35

Details of construction

Permanent-way.—The permanent-way consists of second hand 82lb steel rails on C. I. pot sleepers.

Ballast.—The line is ballasted with gravel

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 600, with a short length of 1 in 200 between Sayama and Cambay.

Agreements and contract—

Agreement, dated the 17th May 1902, *between the Cambay Durbar and the Bombay, Baroda and Central India Railway Company*, as to management, maintenance and working.

Contract, dated the 8th April 1907 (called the principal contract), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the maintenance, management and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Agreement, dated the 17th October 1908, *between the Cambay Durbar and the Bombay, Baroda and Central India Railway Company*, modifying the agreement of 17th May 1902.

Agreement, dated the 10th May 1910, *between the Cambay Durbar and the Bombay, Baroda and Central India Railway Company*. modifying further the agreement of 17th May 1902.

Main provisions of agreements and contract—

(i) *Land.*—Provided free of cost by the Cambay Durbar.

(ii) *Government aid.*—The line is the property of the Cambay Durbar (which provides all funds chargeable to the capital account), and is managed, maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the Company's railway system.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*d*) Petlad-Cambay railway (Tarapur-Cambay section) (5′ 6″ gauge)—*concld.*

Main provisions of agreements and contract—*concld.*

(iii) *Terms of working.*—
(iv) *Distribution of profits.*—
(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of*—
(*a*) Mails, troops, high Government officials and Government stores.
(*b*) Government bullion and coin, and the persons in charge thereof.
(vii) *Power of the Durbar to determine agreement.*—
(viii) *Power of the Company to determine agreement.*—
(ix) *Term of agreement* [*if not determined under* (vii) *and* (viii)].—

} As noted under Petlad Cambay railway (Anand-Tarapur section) (5′ 6″ gauge).

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	12·30	8,66,999	53,711	27,045	3·12	84	49·65
1914-15	12·30	8,67,002	60,852	29,040	3·35	95	52·28
1915-16	12·30	8,74,561	68,054	35,624	4·07	106	47·65
1916-17	12·36	8,75,949	70,620	40,522	4·63	110	42·62
1917-18	12·36	8,80,659	64,122	35,795	4·06	100	44·18
1918-19	12·36	8,80,538	72,605	40,172	4·56	113	44·67
1919-20	12·36	8,80,538	78,007	34,881	3·96	121	55·28
1920-21	12·36	8,80,538	87,531	28,562	3·24	136	67·37
1921-22	12·36	8,80,605	94,606	22,763	2·58	147	75·94
1922-23	12·36	9,13,910	1,10,625	33,730	3·69	172	69·51
1923-24	12·36	9,16,151	1,16,904	47,490	5·18	182	59·38
1924-25	12·36	9,16,151	1,19,578	50,941	5·56	186	57·40
1925-26	12·36	9,16,151	1,18,667	45,960	5·02	185	61·27
1926-27	12·36	9,16,137	1,14,165	42,469	4·63	178	62·80
1927-28	12·36	9,16,137	1,08,321	41,237	4·50	169	61·93
1928-29	12·36	9,17,712	1,21,548	51,489	5·61	189	57·64
1929-30	12·36	9,20,081	1,19,473	46,374	5·04	186	61·18
1930-31	12·36	9,32,964	1,05,792	36,701	3·93	165	65·31
1931-32	12·36	9,33,763	1,06,005	42,294	4·53	165	60·10
1932-33	12·35	9,33,219	1,23,428	52,606	5·64	192	57·38
1933-34	12·35	9,34,639	1,21,735	54,859	5·86	190	54·94
1934-35	12·35	9,34,486	1,07,184	45,146	4·83	167	57·88
1935-36	12·35	9,34,486	1,06,049	47,309	5·06	165	55·39
1936-37	12·35	9,38,237	1,09,687	52,046	5·55	171	52·55
1937-38	12·35	9,47,693	1,10,854	49,964	5·27	173	54·93
1938-39	12·35	9,44,565	1,07,341	48,829	5·17	167	54·51

(*e*) Tapti Valley railway (5′ 6″ gauge)—

Agents—MESSRS. KILLICK, NIXON & CO., BOMBAY.

Date of registration of the Company—17th June 1896.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Udhna to Vyàrâ	1-12-98	35·59	
Vyàrâ to Chinchpada	5-6-99	36·55	
Chinchpada to Nandurbàr	20-7-99	25·20	
Nandurbar to Dondaiche	10-11-99	21·48	
Dondaiche to Nardàna	25-11-99	19·98	
Nardàna to Amalner	15-3-00	16·92	
TOTAL	..	..	155·72

Details of construction—

Permanent-way.—The permanent-way consists of 70-lb. flat-footed rails on wooden and cast iron pot sleepers with small length of 75 lb. flat-footed rails on wooden sleepers and 82 lb rails on cast iron pot sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—Only station yards and important level crossings are fenced.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 200.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(e) Tapti Valley Railway (5′ 6″ gauge)—*contd.*

Contracts—

Dated the 28th August 1896 (called the principal contract), *between the Secretary of State and the Tapti Valley Railway Company*;
Dated the 30th October 1896 (set forth in the schedule to the principal contract of 1896), *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*;
} as to the construction, management, maintenance and working of the Tapti Valley railway.

Dated the 1st February 1901, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, revising, and extending up to the 31st December 1905, the arrangements for the working of the Rajputana-Malwa and other lines.

Dated the 16th January 1902, *between the Secretary of State and the Tapti Valley Railway Company*, modifying the terms on which the Company's line is worked by the Bombay, Baroda and Central India Railway Company.

Dated the 8th April 1907, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the maintenance, management and working, as from the 1st January 1906 of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Dated the 26th August 1907, *between the Secretary of State and the Tapti Valley Railway Company*, for the continuance of the working of the Tapti Valley railway on the terms in force on the 31st December 1905.

Dated the 10th July 1908, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*;
Dated the 12th November 1908, *between the Secretary of State and the Tapti Valley Railway Company*;
} giving effect, as from the 1st July 1908, to the arrangement agreed upon for the improvement of the rebate from interchanged traffic payable to the Tapti Valley Railway Company by the Bombay, Baroda and Central India Railway Company

Dated the 30th June 1916, *between the Secretary of State, the Tapti Valley Railway Company and the Bombay, Baroda and Central India Railway Company* (supplemental to the contracts of 28th August and 30th October 1896, 16th January 1902, 26th August 1907 and 12th November 1908) as to the adoption of the Government financial year for the preparation of accounts from the 1st April 1913.

Dated the 23rd March 1922, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company* (supplemental to the contracts of 30th October 1896, 1st February 1901 and 10th July 1908), modifying, with effect from the 1st April 1922, the arrangement under which the line is worked by the Bombay, Baroda and Central India Railway Company.

Dated the 10th August 1923 (supplemental to the contracts of 28th August 1896, 16th January 1902, 26th August 1907, 12th November 1908 and 30th June 1916) *between the Secretary of State and the Tapti Valley Railway Company*, modifying the contracts between the Secretary of State and the Tapti Valley Railway Company.

Main provisions of contracts—

(i) *Land.*—In British territory provided by the Government free of cost to the Tapti Valley Railway Company. The Secretary of State to use his influence to obtain the free grant of land in Indian States.

(ii) *Government aid.*—
(iii) *Terms of working.*—
(iv) *Distribution of profits.*—
} The Government constructed the line (from funds supplied by the Tapti Valley Railway Company), and manage, work, stock and maintain it, through the agency of the Bombay, Baroda and Central India Railway Company. During the continuance of the contracts between the Secretary of State and the Bombay, Baroda and Central India Railway Company relating to the working of State branches, the charge to the Tapti Valley Railway Company in each year for the provision of rolling-stock and the working and maintenance of the line, is the share of the general working expenses of the whole of the 5′ 6″ gauge system of railways worked by the Bombay, Baroda and Central India Railway Company which is attributable to the Tapti Valley railway in proportion to its gross earnings, subject to a limit of 55* per cent.), thereof in any year. The residue of the gross earnings after deduction of the charge for working, etc., is payable to the Tapti Valley Railway Company.

* This was 44·00 per cent. prior to 1st April 1922.

By agreement with the Bombay, Baroda and Central India Railway Company, the Government allow to the Tapti Valley Railway Company in respect of each year, by way of rebate a sum not exceeding 45 per cent. of the combined shares attributable to the Bombay, Baroda and Central India railway 5′ 6″ and 3′ 3⅜″ gauge systems of the gross earnings (carriage of stores being excluded from traffic interchanged between those railways, or either of them, and the Tapti Valley railway, as will, together with the net earnings of the Tapti Valley Railway Company, make up

4 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(e) Tapti Valley railway (5′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

an amount equal to interest for the year at the rate of 8 per cent. per annum on the actual capital expenditure. The Government also allow to the Tapti Valley Railway Company the sum of Rs. 6,000 per annum towards its office expenses and expenses of management.

(v) *Rates and fares.*—To be such as may from time to time be arranged between the Government and the working agency, but it is provided that they shall be within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway (5′ 6″ gauge). The classification of goods is to be in conformity with that in force on the Bombay, Baroda and Central India railway (5′ 6″ gauge).

(vi) *Special obligations as to the conveyance of—*
(*a*) Mails, troops, high Government officials, and Government stores.
(*b*) Government bullion and coin and the persons in charge thereof.
} As in the case of Bombay, Baroda and Central India railway (5′ 6″ gauge).

(vii) *Power of the Government to determine contract.*—The Government may, by giving 12 months' notice, determine the contract and acquire the railway—

(*a*) on the 31st March 1942, in which case the Government undertake to pay to the Tapti Valley Railway Company in rupees a sum equal to 25 times the average yearly net earnings of the Tapti Valley Railway Company during the last preceding five years, provided that such sum shall not exceed by more than 20 per cent. the total capital expenditure of the Tapti Valley Railway Company, nor be less than such capital expenditure ; or

(*b*) on the 31st March 1951, in which case the Government will pay to the Tapti Valley Railway Company in rupees an amount equal to the total capital expenditure.

(viii) *Power of the Tapti valley Railway Company to surrender contract.*—Nil.

(ix) *Term of contract [if not determined under* (vi) *or* (vii)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Rebate from the Bombay, Baroda and Central India railway.	Total income.	Percentage of total income on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1898	35·91	82,70,413	2,836	..	..	..	..	..	18	48·70	The net earnings for 1898, 1899 and 1st-half of 1900 were credited to interest on capital, and those for 2nd-half of 1900 (including rebate) were treated as a set off against the charge to capital for interest in the accounts for 1st-half of 1901.
1899	138·88	1,21,09,133	2,42,593	..	..	..	..	..	73	47·40	
1900	155·45	1,28,31,291	6,68,475	..	..	..	..	..	85	47·68	
1901	155·48	1,29,18,730	6,00,553	3,42,243	2·65	33,226	3,75,469	2·90	74	43·01	
1902	155·48	1,29,70,581	8,26,485	4,63,242	3·57	45,196	5,08,438	3·92	102	43·95	
1903	155·48	1,30,02,400	8,62,753	4,83,142	3·72	40,258	5,23,400	4·03	107	44·00	
1904	155·48	1,30,77,018	6,58,740	3,68,894	2·82	28,441	3,97,335	3·04	81	44·00	
1905	155·48	1,30,83,629	10,11,222	5,86,921	4·49	2,928	5,89,849	4·51	125	41·96	
1906	155·48	1,30,82,853	11,34,712	6,35,460	4·86	..	6,35,460	4·86	140	44·00	
1907	155·48	1,30,97,237	10,34,612	5,79,383	4·42	..	5,79,383	4·42	128	44·00	
1908	155·48	1,30,90,929	9,98,927	5,59,399	4·27	..	5,59,399	4·27	124	44·00	
1909	155·48	1,31,10,300	11,06,564	6,19,676	4·73	..	6,19,676	4·73	137	44·00	
1910	155·48	1,31,20,549	11,85,910	6,64,110	5·06	..	6,64,110	5·06	147	44·00	
1911	155·48	1,31,37,174	12,91,825	7,23,422	5·51	..	7,23,422	5·51	160	44·00	
1912	155·48	1,31,41,972	14,36,446	8,04,410	6·12	..	8,04,410	6·12	178	44·00	
1st qr. of 1913.	155·48	1,31,43,606	4,01,816	2,25,017	1·71	..	2,25,017	1·71	199	44·00	
1913-14	155 48	1,31,47,512	15,92,836	8,91,988	6·78	..	8,91,988	6·78	197	44·00	
1914-15	155·48	1,31,78,535	13,20,802	7,39,649	5·61	..	7,39,649	5·61	163	44·00	
1915-16	155·48	1,32,03,810	17,22,141	9,64,399	7·30	..	9,64,399	7·30	213	44·00	
1916-17	155·72	1,32,10,781	15,55,554	8,91,238	6·75	..	8,91,238	6·75	192	43·63	
1917-18	155·72	1,32,37,221	15,74,902	8,81,945	6·66	..	8,81,945	6·66	194	44·00	
1918-19	155·72	1,32,38,970	20,03,024	11,21,693	8·47	..	11,21,694	8·47	247	44·00	
1919-20	155·72	1,32,41,268	21,52,400	12,05,343	9·10	..	12,05,343	9·10	266	44·00	
1920-21	155·72	1,32,77,949	20,85,818	11,68,058	8·80	..	11,68,058	8·80	258	44·00	
1921-22	155·72	1,33,31,078	22,46,853	12,58,238	9·44	..	12,58,238	9·44	277	44·00	
1922-23	155·72	1,34,08,647	25,63,493	11,53,572	8·60	..	11,53,572	8·60	317	55·00	
1923-24	155·72	1,34,24,837	27,38,999	12,32,549	9·18	..	12,32,549	9·18	338	55·00	
1924-25	155·72	1,34,52,818	28,83,569	12,97,606	9·65	..	12,97,606	9·65	356	55·00	
1925-26	155·72	1,35,20,326	30,24,979	13,61,241	10·07	..	13,61,241	10·07	374	55·00	
1926-27	155·72	1,35,70,755	29,44,611	13,25,075	9·76	..	13,25,075	9·76	364	55·00	
1927-28	155·72	1,36,04,396	28,65,735	12,89,581	9·48	..	12,89,581	9·48	354	55·00	
1928-29	155·72	1,36,24,863	29,41,700	13,23,765	9·72	..	13,23,765	9·72	363	55.00	
1929-30	155·72	1,36,45,203	29,00,009	13,05,004	9·56	..	13,05,004	9·56	358	55·00	
1930-31	155·72	1,36,66,530	26,57,232	11,95,755	8·74	..	11,95,755	8·74	328	55·00	
1931-32	155·72	1,36,63,527	21,95,072	9,87,782	7·23	1,18,376	11,06,158	8·09	271	55·00	
1932-33	155·72	1,36,67,260	25,37,323	11,41,796	8·35	..	11,41,796	8·35	313	55·00	
1933-34	155·72	1,36,71,891	29,15,816	13,52,298	9·89	..	13,52,298	9·89	360	53·62	
1934-35	155·72	1,36,93,231	26,08,564	11,73,854	8·57	..	11,73,854	8·57	322	55·00	
1935-36	155·72	1,37,10,180	25,99,811	11,69,915	8·53	..	11,69,915	8·53	321	55·00	
1936-37	155·72	1,37,14,014	26,70,804	12,66,089	9·23	..	12,66,089	9·23	330	52·60	
1937-38	155·72	1,37,23,740	28,24,823	12,71,170	9·26	..	12,71,170	9·26	349	55·00	
1938-39	155·72	1,37,46,807	26,11,289	12,05,928	8·77	..	12,05,928	8·77	322	53·82	

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*f*) Bombay, Baroda and Central India railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5	Remarks. 6
RAJPUTANA SECTION—					
Main line—					
Delhi to Rewári	14-2-73	52·25			
Rewári to Alwar	15-9-74	46·10			
Alwar to Bandikui	7-12-74	37·51			
Bandikui to Dausa	20-4-74	17·84			
Dausa to Jaipur	12-10-74	38·14			
Jaipur to Phulera	1-3-75	34·20			
Phulera to Ajmer	1-8-75	49·92			
Ajmer to Beáwar	15-5-78	32·41			
Beáwar to Haripúr	12-8-79	20·85			
Haripur to Sojat Road	20-10-80	20·54			
Sojat Road to Pálanpur	1-1-81	148·44			
Pálanpur to Ahmedabad	15-11-79	85·17			
New zero of Ahmedabad-Dholka branch to facing point on main line of Sabarmati	12-2-08	0·66	584·03		This was the Ahmedabad-Dholka Branch Railway Company's line which was purchased by Government with effect from the 1st July 1922.
Branches and extensions—					
**Ahmedabad-Dholka branch—*					
Sabarmati to Bavla	23-2-03	24·74			
Bavla to Dholka	1-4-03	8·79			
Dholka to Koth Gangad	1-4-23	11·25			
Koth Gangad to Dhandhuka	1-3-25	27·37	72·15		
Viramgam-Wadhwan section—					
Viramgam to Wadhwan†	14-12-02	40·32	40·32		†This section was opened on the 5′ 6″ gauge from 25th May 1872 and converted to and opened on the 3′ 3⅜″ gauge from 14th December 1902
Farukhnagar Salt branch	14-2-73	7·64	7·64		
Agra branch—					
Bandikui to Bharatpur	20-4-74	60·28			
Bharatpur to Agra Fort	11-8-73	35·18			
Agra Fort to Jumna, East Bank (Agra)	1-1-76	1·50	96·96		
Sámbhar Lake Salt branch	1-3-75	4·50			
Extension of Sambhar branch to Kuchaman Road	20-12-79	17·00			
Additional salt lines in the Sambhar lake	1-9-91	3·66	‡ 25·16		‡ Excludes 8·27 miles of Sambhar Salt Sidings handed over to Salt Department from 7th February 1927.
MALWA SECTION—					
Main line—					
Khandwa to Sanáwad	1-2-74	34·20			
Sanáwad to Mortakka	1-4-74	3·50			
Mortakka to Choral	20-1-75	20·50			
Choral to Mhow	1-1-78	15·69			
Mhow to Indore	3-8-76	13·00			
Indore to Fatehabad Chandrawatiganj Junction	3-8-76	25·23			§ The line Khandwa to Indore (86·89 miles) is the Holkar State railway.
Fatehabad Chandrawatiganj Junction to Rutlam	11-7-76	48·75			
Rutlam to Jaora	25-2-80	20·50			
Jaora to Mandsaur	8-4-80	31·75			
Mandsaur to Neemuch	2-7-80	30·25			
Neemuch to Nimbahera	10-3-81	16·40			
Nimbahera to Chitorgarh	19-3-81	17·65			
Chitorgarh to Nasirabad	1-12-81	100·65			
Nasirabad to Ajmer	14-2-76	14·15	392·22		
Ujjain branch—					
Fatehabad Chandrawatiganj to Ujjain	3-8-76	12·79	12·79		
CAWNPORE ACHNERA SECTION—					
Main line—					
Cawnpore to Kanauj	15-12-80	49·20			
Kanauj to Farukhabad	1-2-81	36·71			
Farukhabad to Kásganj	14-4-84	66·78			
Kásganj to Hathras Road	1-7-84	34·04			
Hathras Road to Muttra Cantonment	19-10-75	29·11			
Jumna bridge	1-7-84	1·00			
Muttra Cantonment to old connection Muttra Junction	11-11-07	2·32			
Old connection to Achnera	7-11-81	20·95	240·11		
Branches—					
Brahmavart branch	10-11-85	4·78			
Brindaban branch	26-8-89	7·25	12·03		
Carried over	..	..	..	1,483·41	

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*f*) Bombay, Baroda and Central India railway (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward .	..	..	..	1,483·41	
REWÁRI-BHÁTINDA-FÁZILKA SECTION—					
Main line—					
Rewari to Hissar	20-3-83	88·20			
Hissar to Sirsa	1-1-84	50·75			
Sirsa to Kot Kapúra	1-10-84	73·24			
Kot Kapúra to Fázilka	1-1-85	50·26			
			262·45		
Rewari-Phulera Chord—					
Rewari to Narnaul	11-12-04	32·55			
Narnaul to Phulera	18-5-05	100·53			
			133·08		
Total open mileage . .	..	..	..	1,878·94	
DOUBLE LINE, RAJPUTANA SECTION—					
At Delhi	25-12-02	2·82	2·82	2·82	

Details of construction—

Permanent-way.—On the Rajputana section, the main line, from Delhi to Ahmedabad *via* Bandikui is laid with 60 lb. British Standard rails, partly on wooden and partly on steel trough sleepers except between Delhi Serai Rohilla and Rewari, and Rewari and Rajgarh where 75-lb. and 50-lb. rails respectively are laid on wooden sleepers; station yards between Rewari and Rajgarh are laid with 60-lb. rails on steel trough sleepers. Delhi Queens Road to Delhi Serai Rohilla double line (up and down main line) are laid with 50 lb. N. S. Rails on wooden sleepers.

The Agra Branch is laid with 60-lb. (revised) British Standard rails on steel trough sleepers except between Agra Idgah and Achnera and Ghosrana and Bandikui where 66¼ lb. and 50 lb. rails respectively are laid on wooden sleepers.

Cawnpore Achnera Section and Rewari Phulera Chord are laid with 50-lb. rails on wooden sleepers.

The Malwa section, from Ajmer to Khandwa, is laid with 50-lb. flat-footed steel rails and wooden sleepers.

The Rewari-Fazilka section is laid with 41¼-lb. flat-footed steel rails and wooden sleepers, except on the length from mile 0 to mile 186 which has been relaid with second-hand 50-lb. rails taken out from the main line.

The Sambhar branch has also been relaid with second-hand 50-lb. rails and wooden sleepers.

The other small branches except Ahmedabad-Dholka and Dholka-Dhanduka, Viramgam-Wadhwan and Ujjain branch Railways from miles 0 to 73, 40¼ to 79¾ and 0 to 14 respectively are all laid with 41¼-lb. flat-footed steel rails and wooden sleepers.

Ahmedabad-Dholka and Dholka-Dhanduka, Viramgam-Wadhwan and Ujjain branch Railways from miles 0 to 73, 40¼ to 79¾ and 0 to 14, respectively, have been relaid with second-hand 50-lbs. rails.

Ballast.—The line is ballasted throughout with stone, kunkur, sand and hard quartz.

Fencing.—The following lines are fenced: (1) Rajputana section main line, Delhi to Ahmedabad *via* the Rewári-Phulera chord, 521·48 miles; Rewári-Bandikui-Phulera loop, 173·76 miles, and branches, 94·61 miles; (2) Malwa section, main line, Khandwa to Ajmer, 99·13 miles, and branch 2·17 miles; (3) Cawnpore-Achnera section, main line, 148·23 miles and Brindaban branch, 2·69 miles; (4) Rewári-Fázilka section, 114·62 miles, including stations; and (5) Viramgam-Wadhwan 28·08 miles. On the Ahmedabad-Dholka and Dholka-Dhanduka branches the station yards only are fenced.

Curves.—The sharpest curve is of 560 feet radius.

Gradients.—On the main line of the Rajputana section, Delhi to Ahmedabad, *via* Rewári-Phulera chord; on the Rewári-Bandikui-Phulera loop; Ujjain branch; and on the Brahmavart branch, the ruling gradient is 1 in 150. On the Agra branch it is 1 in 150, except for 1,058 feet where it is 1 in 142, and 841 feet, where it is 1 in 145 at mile 1. On the Sámbhar branch, it is 1 in 200, except for 3,810 feet where it is 1 in 150 at the beginning of the line. On the Farukhnagar branch it is 1 in 100. On the Malwa section it is 1 in 150, except between Khandwa and Kalakhund where it is 1 in 100 and between Kalakhund and Patal Pani (Mhow Ghat) where it is 1 in 40. On the Cawnpore-Achnera section it is 1 in 150. On the Brindaban branch it is 1 in 200; and on the Rewári-Fázilka section it is also 1 in 200 except for 634 feet at mile 160 where it is 1 in 169. On Viramgam-Wadhwan it is 1 in 330.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*f*) Bombay, Baroda and Central India railway (3′ 3⅜″ gauge)—*concld.*

Contracts—
Main provisions of contracts— { As noted under Bombay, Baroda and Central India railway (5′ 6″ gauge).

Statistics of working. (Those for the periods prior to 1906 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

NOTE.—From the year 1936-37 the net earnings/working expenses have been arrived at after taking into account the 'Appropriation to Depreciation Reserve Fund' instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Includes the Godhra-Ratlam-Nagda Section up to 1911 and Viramgam-Wadhwan Section *from* 1912.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	‡3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.		Rs.	Rs.	
1906 .	1,915·50	16,65,57,367	2,80,04,905	1,47,43,530	8·35	65,99,940		+81,43,590	281	47·35
1907 .	1,916·20	16,85,93,587	2,87,22,171	1,43,93,902	8·54	53,09,963		+90,83,939	288	49·89
1908 .	1,918·54	17,64,83,727	2,47,43,850	94,10,603	5·33	60,87,222		+33,43,381	249	61·97
1909 .	1,919·72	18,04,84,544	2,51,98,999	1,08,98,636	6·04	61,19,498		+47,79,138	252	56·75
1910 .	1,919·64	18,18,63,774	2,85,10,644	1,44,84,804	7·96	61,72,944		+8,11,860	286	49·20
1911 .	1,917·73	18,23,81,723	3,08,25,507	1,50,83,603	8·27	63,40,819		+87,42,784	309	51·07
1912 .	1,815·64	16,55,41,245	3,15,97,819	1,61,10,247	9·73	59,67,519	Included with Bombay, Baroda and Central India railway (5′ 6″ gauge).	+1,01,42,728	335	49·01
1st qr. of 1913	1,815·64	16,66,23,366	81,34,086	45,29,216	2·72	14,56,507		+30,72,709	345	44·32
1913-14 .	1,815·64	16,78,56,869	2,98,50,716	1,47,44,027	8·78	53,64,252		+93,79,775	316	50·61
1914-15 .	1,815·64	17,10,31,351	2,86,44,574	1,32,97,462	7·77	57,21,867		+75,75,595	303	53·58
1915-16 .	1,821·61	17,14,42,885	3,19,96,389	1,68,25,911	9·81	57,08,565		+1,11,17,346	338	47·41
1916-17 .	1,821·61	17,13,91,668	3,42,52,131	1,90,55,200	11·12	55,44,480		+1,35,10,720	362	44·39
1917-18 .	1,821·61	17,02,51,167	3,50,63,620	1,91,48,143	11·25	60,74,853		+1,30,73,290	370	45·38
1918-19 .	1,821·61	17,54,97,989	4,30,12,732	2,34,50,138	13·36	61,59,832		+1,72,90,306	454	45·48
1919-20 .	1,821·63	17,73,20,116	4,24,89,168	1,76,13,869	9·93	62,91,684		+1,13,22,185	449	58·55
1920-21 .	1,810·34	18,38,51,355	4,26,88,927	1,33,85,385	7·28	63,26,468		+70,58,917	452	68·64
1921-22 .	1,810·26	18,09,91,307	4,46,78,162	1,14,96,136	6·18	66,44,991		+48,51,145	475	74·27
1922-23 .	1,843·79	19,12,84,778	5,00,98,327	1,79,69,030	9·40	67,85,177		+1,11,83,853	523	64·13
1923-24 .	1,855·04	19,76,20,582	5,00,84,920	2,13,77,921	10·93	71,36,019		+1,42,41,902	519	57·32
1924-25 .	1,884·46	19,93,39,498	5,51,47,062	2,41,48,888	12·11	73,08,198		+1,68,40,690	563	56·21
1925-26 .	1,884·46	20,37,43,019	5,24,41,153	2,21,59,622	10·88	75,65,198		+1,45,94,424	535	57·74
1926-27 .	1,876·19	20,71,52,307	5,15,12,734	2,10,67,777	10·17	77,00,001		+1,33,67,776	528	59·12
1927-28 .	1,876·19	21,33,07,126	5,04,84,400	2,00,34,676	9·39	79,38,241		+1,20,96,435	517	60·35
1928-29 .	1,876·16	21,81,17,312	5,16,70,714	2,22,42,739	10·20	84,39,683		+1,38,03,056	530	56·99
1929-30 .	1,876·16	22,21,86,753	5,22,76,698	2,15,45,457	9·70	84,36,837		+1,31,08,620	536	58·79
1930-31 .	1,877·26	22,54,28,651	4,91,63,171	1,86,36,499	8·26	88,53,496		+97,83,003	504	62·06
1931-32 .	1,877·26	22,65,60,041	4,37,80,849	1,73,56,012	7·66	89,50,823		−84,05,189	448	60·35
1932-33 .	1,878·47	22,72,58,051	4,43,35,559	1,92,18,347	8·46	89,41,541		+1,02,76,806	464	56·68
1933-34 .	1,881·28	22,54,18,530	4,52,82,740	1,95,73,142	8·68	88,49,547		+1,07,23,595	463	56·70
1934-35 .	1,881·28	22,58,75,167	4,78,92,119	2,18,51,251	9·67	86,82,745		+1,31,68,506	490	54·37
1935-36 .	1,881·28	22,60,19,248	4,82,61,445	2,16,45,011	9·57	86,16,990		+1,30,28,021	493	55·15
1936-37 .	§1,881·28	22,64,46,321	5,10,09,314	2,32,22,051	10·25	85,11,433		+1,47,10,618	521	54·47
1937-38 .	1,878·94	22,73,35,431	5,19,38,864	2,33,71,086	10·28	85,04,584		+1,48,66,502	532	55·00
1938-39 .	1,878·94	22,88,47,053	5,09,18,324	2,14,45,761	9·37	85,27,885		+1,29,17,876	521	57·88

‡Includes premia paid by Govt. in the purchase of the Ahmedabad-Dholka Railway from 1st July 1922.

§ The difference of 0·01 with the figure shown in Statement 8 of Vol. II of 1936-37 (page 64) is due to the figures being rounded off differently by the Railway for the purpose of the History and Volume II of that year.

(*g*) Ahmedabad-Parantij railway (3′ 3⅜″ gauge)—

Agents—MESSRS. KILLICK, NIXON & CO., BOMBAY.

Date of registration of the Company—6th January 1896.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Ahmedabad to Talod	1-5-97	32·85	
Talod to Parántij	2-7-97	7·83	
Parántij to Himmatnagar	23-10-97	14·05	
Himmatnagar to Khed Brahma	1-7-11	34·00	
TOTAL	..	..	88·73

Details of Construction—

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on wooden sleepers

Ballast.—The line is ballasted with kunkur, sand and stone.

Fencing.—Only station yards are fenced.

Curves.—The sharpest curve is of 1,146 feet radius

Gradients.—The ruling gradient is 1 in 150.

Contracts—

Dated the 13th March 1896 (called the principal contract), *between the Secretary of State and the Ahmedabad-Parántij Railway Company*, as to the construction of the Ahmedabad-Parántij railway.

Dated the 4th June 1896, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working by the Company of the Ahmedabad Parántij railway.

Dated the 1st February 1901, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, revising, and extending up to the 31st December 1905, the arrangements for the working of the Rajputana-Malwa and other lines.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*g*) Ahmedabad-Parantij railway (3′ 3⅜″ gauge)—*contd.*

Contracts—*concld.*

Dated the 29th January 1902, *between the Secretary of State and the Ahmedabad-Parántij Railway Company*, modifying the terms on which the Company's line is worked by the Bombay, Baroda and Central India Railway Company.

Dated the 8th April 1907, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India railway, the Rajputana-Malwa railway and other subsidiary lines.

Dated the 17th September 1907, *between the Secretary of State and the Ahmedabad-Parántij Railway Company*, for the continuance of the working of the Ahmedabad-Parántíj railway on the terms in force on the 31st December 1905.

Dated the 2nd October 1908, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*;
Dated the 24th November 1910, *between the Secretary of State and the Ahmedabad-Parántíj Railway Company*;
} as to the construction, management, maintenance and working of the Brahmakhed extension as part of the Ahmedabad-Parántíj railway, subject to the modifications therein set forth of the terms applicable to the main line.

Dated the 30th June 1916, *between the Secretary of State, the Ahmedabad-Parántíj Railway Company and the Bombay, Baroda and Central India Railway Company*, supplemental to the contracts of 13th March and 4th June 1896, 29th January 1902, 17th September 1907, 2nd October 1908, and 24th November 1910 as to the adoption of the Government financial year for the preparation of accounts from the 1st April 1913.

Dated the 28th July 1933 *between the Secretary of State and the Ahmedabad Parántij Railway Company.*
Dated the 29th January 1934 *between the Secretary of State and the B. B. and C. I. Railway Company.*
} As to the continuance of the working of the Ahmedabad-Parántij Railway with effect from the 1st January 1931.

Main provisions of contract—

(i) *Land.*—Provided by the Government free of cost to the Ahmedabad-Parántij Railway Company. The Secretary of State to use his influence to obtain the free grant of land in Indian States.

(ii) *Government aid.*—
(iii) *Terms of working.*—
(iv) *Distribution of profits.*—
} The Government constructed the line (from funds supplied by the Ahmedabad-Parántij Railway Company), and manage, work, stock and maintain it, through the agency of the Bombay, Baroda and Central India Railway Company. During the continuance of the contracts between the Secretary of State and the Bombay, Baroda and Central India Railway Company relating to the working of State branches, the charge to the Ahmedabad-Parántij Railway Company in each half-year for the provision of rolling-stock and the working and maintenance of the line is 60 per cent. of the gross earnings of the Ahemedabad-Parántij Railway for the same year less the maximum rebate of 10 per cent. of the combined shares attributable to the Bombay, Baroda and Central India Railway 5′ 6″ and 3′ 3⅜″ gauge systems of the gross earnings from traffic interchanged between those railways, which the Governments entitled to retain. The residue of the gross earnings, after deduction of the charge for working, etc., is payable to the Ahmedabad-Parántíj Railway Company, half-yearly, the payment for the first-half year being subject to adjustment at the end of the year.

By agreement with the Bombay, Baroda and Central India Railway Company, the Government allow to the Ahmedabad-Parántíj Railway Company in respect of each year, by way of rebate, a sum not exceeding 10 per cent. of the combined shares attributable to the Bombay, Baroda and Central India railway 5′ 6″ and 3′ 3⅜″ gauge systems of the gross earnings from traffic inter-changed between those railways, or either of them, and the Ahmedabad-Parántíj railway, as will together with the net earnings of the Ahmedabad-Parántíj Railway Company, make up an amount equal to interest for the year at the rate of 4 per cent. per annum until the close of the half-year next after that in which the Brahmakhed extension is opened throughout for public traffic, and thereafter at 5 per cent. per annum, on the actual capital expenditure. The Government also allow to the Ahmedabad-Parántij Railway Company the sum of Rs. 5,000 per annum until the close of the half-year next after that in which the Brahmakhed extension is opened throughout for public traffic, and thereafter Rs. 6,000 per annum towards its office expenses and expenses of management

(v) *Rates and fares.*—To be such as may from time to time be arranged between the Government and the working agency, but it is provided that they shall be within the maximum and minimum rates and fares for the time being in force on the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge). The classification of goods is to be in conformity with that in force on the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge).

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*g*) Ahmedabad-Parantij railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of contract—*contd.*

(vi) *Special obligation as to the conveyance of—*
(*a*) Mails, troops, high Government officials, and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—
} As in the case of Bombay, Baroda and Central India railway.

(vii) *Power of the Government to determine contract.*—The contract shall stand determined on the 31st December 1946 on which date the Government will acquire the Railway on payment to the Ahmedabad-Parántij Railway Company a sum of Rs. 45,41,087-7-6 together with a sum of money equal to the authorised capital expenditure of the Ahmedabad-Parántij Railway Company as appearing in the capital account of the Ahmedabad-Parántij Railway Company incurred from the 1st January 1931 to the 31st December 1946 without any premium.

(viii) *Power of the Ahmedabad-Parántij Railway Company to surrender contract.*—Nil.

(ix) *Term of contract [if not determined under* (vi) *or* (vii)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Rebate from the Bombay, Baroda and Central India railway.	Total income.	Percentage of total income on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1897 . .	54·59	19,42,211	69,069	36,665	1·89	..	36,665	1·89	46	46·92
1898 . .	54·59	19,42,971	1,49,790	85,836	4·42	..	85,836	4·42	53	42·70
1899 . .	54·70	19 49,016	2,10,634	1,21,687	6·24	..	1,21,687	6·24	74	42·23
1900 .	54·70	19,55,305	2,65,105	1,55,952	7·98	..	1,55,952	7·98	93	41·17
1901 . .	54·70	19,49,355	1,77,438	99,365	5·10	..	99,365	5·10	62	44·00
1902 . .	54·70	19,70,012	1,79,794	1,00,685	5·11	..	1 00,685	5·11	63	44·00
1903 . .	54·70	19,88,869	1,50,112	84,063	4·23	..	84,063	4·23	53	44·00
1904 . .	54·70	19,89,045	1 86,227	1,04,287	5·24	..	1,04,287	5·24	65	44·00
1905 . .	54·70	19,91,753	1,98,713	1,15,469	5·80	..	1,15,649	5·80	70	41·89
1906 . .	54·70	19,98,023	2,20,934	1,23,727	6·19	..	1,23,727	6·19	78	44·00
1907 . .	54·70	20,08,966	2,64,637	1,48,197	7·38	..	1,48,197	7·38	93	44·00
1908 . .	54·70	20,26,012	2,95,664	1,65,572	8·17	..	1,65,572	8·17	104	44·00
1909 . .	54·70	20,32,797	3,04,884	1,70,735	8·40	..	1,70,735	8·40	107	44·00
1910 . .	54·70	28,71,739	3,21,710	1,80,158	6·27	..	1,80,158	6·27	113	44·00
1911 . .	88·70	36,40,022	3,52,475	1,97,386	5·42	..	1,97,386	5·42	94	44·00
1912 . .	88·70	36,64,696	3,47,122	1,94,388	5·30	..	1,94,388	5·30	75	44·00
1st qr. of 1913	88·70	36,83,679	1,03,125	57,918	1·57	..	57,918	1·57	90	44·00
1913-14 .	88·70	37,08,874	4,02,382	2,25,334	6·08	..	2,25,334	6·08	87	44·00
1914-15 .	88·70	37,18,368	4,25,995	2,38,557	6·42	..	2,38,557	6·42	92	44·00
1915-16 .	88·70	37,18,830	3,84,630	2,15,393	5·79	..	2,15,393	5·79	83	44·00
1916-17 .	88·70	37,23,823	3,37,371	1,93,542	5·20	..	1,93,542	5·20	73	42·83
1917-18 .	88·70	37,23,327	3,59,845	2,01,513	5·41	..	2,01,513	5·41	78	44·00
1918-19 .	88·70	37,23,351	4,54,307	2,54,411	6·83	..	2,54,411	6·83	98	44·00
1919-20 .	88·70	37,24,439	5,15,104	2,88,458	7·75	..	2,88,458	7·75	112	44·00
1920-21 .	88·70	37,25,393	6,04,060	3,38,273	9·08	..	3,38,273	9·08	131	44·00
1921-22 .	88·70	37,26,319	6,83,447	3,82,730	10·27	..	3,82,730	10·27	148	44·00
1922-23 .	88·70	37,26,847	8,07,230	4,52,049	12·13	..	4,52,049	12·13	175	44·00
1923-24 .	88·70	37,40,839	8,07,299	4,52,088	12·09	..	4,52,088	12·09	175	44·00
1924-25 .	88·70	37,40,894	7,91,073	4,43,001	11·84	..	4,43,001	11·84	172	44·00
1925-26 .	88·70	37,53,724	8,66,658	4,85,329	12·93	..	4,85,329	12·93	188	44·00
1926-27 .	88·70	37,61,173	7,60,835	4,26,067	11·33	..	4,26,067	11·33	165	44·00
1927-28 .	88·70	37,67,211	8,80,614	4,93,144	13·09	..	4,93,144	13·09	191	44·00
1928-29 .	88·73	37,74,505	9,60,921	5,38,116	14·26	..	5,38,116	14·26	208	44·00
1929-30 .	88·73	37,82,572	8,86,002	4,96,161	13·12	..	4,96,161	13·12	192	44·00
1930-31 .	88·73	38,04,301	8,33,719	4,31,253	11·33	..	4,31,253	11·33	181	48·28
1931-32 .	88·73	38,05,627	8,54,834	3,41,934	8·98	..	3,41,934	8·98	185	60·00
1932-33 .	88·73	38,05,844	9,61,245	3,84,498	10·10	..	3,84,498	10·10	205	60·00
1933-34 .	88·73	38,05,859	9,05,903	3,62,361	9·52	..	3,62,361	9·52	196	60·00
1934-35 .	88·73	38,05,859	8,80,290	3,52,116	9·25	..	3,52,116	9·25	191	60·00
1935-36 .	88·73	38,05,859	9,74,316	3,89,726	10·24	..	3,89,726	10·24	211	60·00
1936-37 .	88·73	38,06,480	9,93,250	3,97,299	10·44	..	3,97,299	10·44	215	60·00
1937-38 .	88·73	38,05,859	10,09,503	4,03,801	10·61	..	4,03,801	10·61	219	60·00
1938-39 .	88·73	38,17,310	10,61,877	4,24,750	11·13	..	4,24,750	11·13	230	60·00

(*h*) Dhrangadra railway (3′ 3⅜″ gauge)—

This line was constructed for the Indian State of Dhrangadra (after which it is named). It was worked up to the 31st March 1911 by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway. The Coalition

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*h*) Dhrangadra railway (3′ 3⅜″ gauge)—*contd*

ceased to exist on the 1st April 1911, from which date the line was worked by the Bhavnagar State railway until the 1st October 1919, when it was made over to the Bombay, Baroda and Central India Railway Company for working.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Wadhwan Junction to Dhrangadra	1-6-98	20·43	
Dhrangadra to Halvad	1-1-02	19·72	
New entrance to Quarry siding at Kuda	27-6-26	0·13	
TOTAL OPEN MILEAGE	..	..	40·28

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails laid on deodar and jodka sleepers.

Ballast.—The ballast used is of broken sand stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 716 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

Dated the 31st January 1920, *between the Government of His Highness the Maharaja of Dhrangadra and the Bombay, Baroda and Central India Railway Company*, for the maintenance, management and working of the Dhrangadra railway, with effect from the 1st October 1919.

Main provisions of agreement—

(i) *Land.*—Provided free of cost by the Dhrangadra Durbar.

(ii) *Government aid.*—The line is the property of the Dhrangadra Durbar (which provides all funds chargeable to Capital Account) and is managed, maintained, and stocked, and worked by the Bombay, Baroda and Central India Railway Company as part of the Company's Railway System.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— The Company works the Dhrangadra railway at actual expenses for maintenance of way, works and stations, other than the cost of general supervision (including any single item of capital expenditure not exceeding Rs. 2,000, subject to a maximum charge on such account of an amount bearing the same percentage of gross receipts as obtained for similar expenditure on the Bombay, Baroda and Central India railway 3′ 3⅜″ gauge system) and 35 per cent. of the gross receipts for general supervision in all departments and all the working expenses under abstracts B to G *plus* 5 per cent. of the gross receipts for the use of the Company's rolling-stock, etc., subject to a total maximum of 50 per cent. of the gross receipts of the Dhrangadra railway. The residue of the gross earnings after deduction of the charges for working, etc., is payable to the Dhrangadra Durbar each half year, the payment for the first half-year being subject to adjustment at the end of the year.

(v) *Rates and fares.*—To be fixed from time to time with the approval of the Durbar, but in the absence of any special agreement between them, they are, as far as may be, to conform to those generally in force on the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge).

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, high Government officials, and Government stores.—Mails and postal officers on duty to be carried at the rates and on the conditions in force from time to time on State railways in British India. (There is no provision for the carriage at special rate of troops, high Government officials and Government stores.)

(*b*) Government bullion and coin and the persons in charge thereof.—Not specified.

(vii) *Power of the Durbar to determine agreement.*—
(viii) *Power of the Company to determine agreement.*— Either party may at any time determine the agreement on giving 12 months' notice to the other. Such notice shall expire only either on the 30th September or the 31st March in any years.

(ix) *Term of agreement* [*if not determined under* (vi) *or* (vii)].—Not specified.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*h*) Dhrangadra railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	20·63	5,81,236	87,131	42,643	7·34	81	51·06
1914-15	40·13	11,37,252	1,15,044	59,780	5·26	55	48·04
1915-16	42·71	14,07,179	1,51,106	72,155	5·13	68	52·25
1916-17	42·71	13,93,557	1,19,768	41,623	2·99	54	65·25
1917-18	42·71	14,12,125	1,48,033	57,761	4·09	67	60·98
1918-19	42·71	13,97,241	2,15,225	94,015	6·73	97	56·32
1919-20	40·15	14,18,179	1,99,763	97,653	6·88	96	51·12
1920-21	40·15	13,93,643	1,93,151	96,575	6·93	93	50·00
1921-22	40·15	14,24,041	1,98,935	99,467	6·98	95	50·00
1922-23	40·15	14,72,596	2,71,535	1,35,767	9·22	130	50·00
1923-24	53·71	14,81,309	2,48,810	1,24,405	8·40	114	50·00
1924-25	53·71	14,80,951	2,09,262	1,04,631	7·07	100	50·00
1925-26	53·71	14,94,178	2,15,941	1,07,970	7·23	103	50·00
1926-27	53·84	14,95,800	1,90,960	95,480	6·38	68	50·00
1927-28	53·84	14,95,592	1,75,290	87,645	5·86	63	50·00
1928-29	40·28	14,98,959	2,51,017	1,25,508	8·37	120	50·00
1929-30	40·28	14,95,265	1,97,575	98,787	6·61	94	50·00
1930-31	40·28	14,98,686	1,98,181	99,090	6·61	95	50·00
1931-32	40·28	15,00,533	1,89,259	94,629	6·31	90	50·00
1932-33	40·28	15,09,479	2,13,930	1,06,965	7·09	102	50·00
1933-34	40·28	15,09,479	2,07,176	1,03,588	6·86	99	50·00
1934-35	40·28	15,09,479	2,30,633	1,15,316	7·64	110	50·00
1935-36	40·28	15,09,479	2,19,106	1,09,553	7·26	104	50·00
1936-37	40·28	15,09,824	2,12,173	1,06,087	7·03	101	50·00
1937-38	40·28	15,09,651	1,90,763	95,382	6·32	91	50·00
1938-39	40·28	15,10,159	2,03,363	1,01,682	6·73	97	50·00

(*i*) Palanpur-State railway (3′ 3⅜″ gauge).

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Palanpur to Deesa	8-11-93	17·11	17·11

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb flat-footed steel rails, 2·75 miles of which are laid on cast iron plate sleepers and the rest on wooden sleepers of various kinds.

Ballast.—The line is ballasted with stone and sand.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 150.

4 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*i*) Palanpur-State railway (3′ 3⅜″ gauge)—*contd.*

Contracts—

Letter from the Government of India, Public Works Department, No. 352-R.C., dated the 25th March 1892, to the Government of Bombay.

Letter from the Under Secretary of State for India, No. 682, dated the 18th May 1892, to the Board of Directors, Bombay, Baroda and Central India Railway Company.

Letter from the Board of Directors, Bombay, Baroda and Central India Railway Company, No. 611, dated the 20th May 1892, to the Under Secretary of State for India.

Letter from the Under Secretary of State for India, No. 920, dated the 22nd June 1892, to the Board of Directors, Bombay, Baroda and Central India Railway Company.

Letter from the Government of Bombay, No. 1643, dated the 19th August 1892, to the Government of India, Public Works Department.

} As to the construction, management, maintenance and working by the Bombay, Baroda and Central India Railway Company, of the Palanpur-Deesa railway as a part of the Rajputana-Malwa railway.

Contract, dated the 1st February 1901, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, revising, and extending up to the 31st December 1905, the arrangements for the working of the Rajputana-Malwa and other lines.

Contract, dated the 8th April 1907, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India Railway, the Rajputana-Malwa railway and other subsidiary lines.

NOTE.—The Palanpur Durbar has purchased the Secretary of State's interest in the line on and from the 1st April 1934. Agreement for working the line is under correspondence with the Durbar.

Main provisions of contract—

(i) *Land.*—Provided free of cost by the Pálanpur Durbar.

(ii) *Government aid.*—The railway is owned jointly by the Government and the Pálanpur Durbar, and the former provide any further open line capital funds. It was constructed and is managed maintained, stocked and worked by the Bombay, Baroda and Central India Railway Company as part of the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge).

(iii) *Terms of working.*—The railway is debited with a share of the general working expenses of the Bombay, Baroda and Central India Railway Company's system in proportion to the gross earnings of the Pálanpur-Deesa railway.

(iv) *Distribution of profits.*—The net earnings, after deducting the working expenses as in (iii) above in any half-year, are to be divided between the Government and the Pálanpur Durbar in proportion to the capital provided by each, after excluding (so long as the line remains a 3′ 3⅜″ gauge one) from the Government capital the sum of Rs. 25,117 the extra expenditure incurred in providing a 5′ 6″ gauge sub-structure.

(v) *Rates and fares.*—

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, high Government officials and Government stores.—

(*b*) Government bullion and coin, and the persons in charge thereof.—

} As under Bombay, Baroda and Central India railway (5′ 6″ gauge).

(vii) *Power of the Government to determine contract.*—
(viii) *Power of the Company to determine contract.*—
(ix) *Term of contract.*—

} The agreement is co-terminous with the Company's contract with the Secretary of State for working the Bombay, Baroda and Central India railway (3′ 3⅜″ gauge), unless it be decided to extend the railway in which case it will be open to the Government to terminate the working arrangement on giving the Company six months' notice.

4 BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd*

(*j*) Palanpur-State railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.		Gross earnings	Net earnings.		Percentage of net earnings on total capital outlay given in columns (3) and (4).		Interest on Government capital.	Gain or loss to Government *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
		Contributed by the Pálanpur Durbar.	Contributed by Government.		Attributable to the Durbar.	Attributable to Government.	On capital contributed by the Durbar.	On capital contributed by Government.				
1	2	3	4	5	6	7	8	9	10	11	12	13
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	
1893 .	17·28	1,85,000	1,78,953	4,436	1,335	1,110	0·72	0·62	5,371	—4,261	33	44 88
1894 .	17·28	1,85,000	2,14,601	37,544	11,365	11,781	6·14	5·49	8,783	+2,998	42	38·35
1895 .	17·28	1,85,000	2,15,374	38,182	11,333	11,512	6·13	5·35	8,378	+3,134	42	40·17
1896 .	17·28	1,85,000	2,32,746	51,629	14,101	15,072	7·62	6·48	9,149	+5,923	57	43·49
1897 .	17·28	1,85,000	2,33,264	43,264	10,883	12,243	5·88	5·25	9,305	+2,938	48	46·55
1898 .	17·28	1,85,000	2,33,264	38,199	10,334	11,628	5·59	4·99	9,331	+2,297	43	42·51
1899 .	17·28	1,85,000	2,33,264	44,628	12,102	13,618	6·54	5·84	9,330	+4,288	50	42·37
1900 .	17·28	1,85,000	2,33,264	47,669	12,636	14,218	6·83	6·10	9,330	+4,888	53	43·61
1901 .	17·28	1,85,000	2,33,264	36,805	9,375	10,548	5·07	4·52	9,330	+1,218	41	45·87
1902	17·28	1,85,000	2,36,786	33,690	8,329	9,521	4·50	4·02	9,408	+113	37	47·01
1903 .	17·28	1,85,000	2,37,069	29,734	7,141	8,181	3·86	3·45	9,432	—1,251	33	48·47
1904 .	17·28	1,85,000	2,37,069	29,185	7,280	8,340	3·94	3·52	9,474	—1,134	32	46·48
1905 .	17·28	1,85,000	2,37,069	35,178	9,469	10,848	5·12	4·58	9,472	+1,376	39	42·25
1906	17·28	1,85,000	2,39,155	40,154	9,862	11,376	5·33	4·76	9,531	+1,845	45	47·11
1907 .	17·28	1,85,000	2,39,155	42,061	10,266	11,878	5·55	4·97	7,223	+4,655	47	47·35
1908 .	17·28	1,85,000	2,47,156	45,680	9,097	10,728	4·92	4·34	8,213	+2,515	51	56·60
1909 .	17·28	1,85,000	2,45,700	53,323	11,757	14,034	6·36	5·71	8,259	+5,775	59	51·63
1910	17·28	1,85,000	2,45,700	58,152	13,663	6,291	7·39	6·63	8,216	+8,075	65	48·49
1911	17.28	1,85,000	2,45,700	52,775	11,949	14,248	6·46	5·80	8,332	+5,916	59	50·36
1912 .	17.28	1,85,000	2,45,700	51,837	11,891	14,177	6·43	5·77	8,400	+5,777	58	49·71
1st qr. of 1913 .	17·28	1,85,000	2,45,700	14,813	3,677	4,384	1·99	1·78	2,089	+2,295	66	45·58
1913-14 .	17·28	1,85,000	2,45,700	57,919	13,258	15,808	7·17	6·43	8,324	+7,484	64	49 84
1914-15	17·28	1,85,000	2,45,700	61,408	13,328	15,892	7·20	6·47	8,598	+7,294	68	52·42
1915-16 .	17·28	1,85,000	2,45,700	66,539	15,897	18,955	8·59	7·71	8,532	+10,423	74	47·62
1916-17 .	17·28	1,85,000	2,45,700	56,069	14,632	17,445	7·91	7·10	8,090	+9,346	62	42·79
1917-18	17·28	1,85,000	2,45,000	58,820	15,009	17,896	8·11	7·28	8,533	+9,363	65	44·06
1918-19	17·28	1,85,000	2,45,700	70,133	17,720	21,128	9·58	8·60	8,555	+12,573	78	44·61
1919-20	17·28	1,85,000	2,45,700	84,253	17,193	20,502	9·29	8·34	8,372	+12,130	94	55·26
1920-21 .	17·28	1,85,000	2,45,700	89,172	13,273	15,825	7·17	6·44	8,170	+7,655	99	67·37
1921-22 .	17·28	1,85,000	2,45,700	96,879	10,632	12,678	5·75	5·16	8,170	+4,608	108	75·94
1922-23 .	17·28	1,85,000	2,45,700	1,05,502	14,672	17,496	7·93	7·12	8,170	+9,326	117	69·51
1923-24 .	17·28	1,85,000	2,45,700	1,12,246	20,797	24,797	11·24	10·09	8,170	+16,627	125	59·38
1924-25 .	17·28	1,85,000	2,45,700	1,07,318	20,853	24,864	11·27	10·12	8,170	+16,694	119	57·40
1925-26 .	17·28	1,85,000	2,45,700	1,08,123	19,101	22,775	10·32	9·27	8,170	+14,605	120	61·27
1926-27 .	17·28	1,85,000	2,45,700	1,00,621	17,073	20,358	9·23	8·29	8,170	+12,188	113	62·80
1927-28 .	17·28	1,85,000	2,45,700	1,09,552	19,024	22,682	10·28	9·23	8,170	+14,512	122	61·93
1928-29	17·28	1,85,000	2,45,700	1,12,121	21,664	25,830	11·71	10·51	8,170	+17,660	125	57·64
1929-30 .	17·11	1,85,000	2,45,700	1,04,065	18,425	21,969	9·96	8·94	8,170	+13,799	117	61·18
1930-31 .	17·11	1,85,000	2,45,700	1,04,885	16,597	19,789	8·97	8·05	8,170	+11,619	118	65·31
1931-32 .	17·11	1,85,000	2,47,128	93,076	16,879	20,296	9·12	8·20	8,251	+12,005	105	60·10
1932-33 .	17·11	1,85,000	2,47,128	98,200	19,024	22,830	10·28	10·45	8,249	+14,581	110	57·38
1933-34 .	17·11	1,85,000	2,47,128	97,615	19,995	23,995	10·80	9·70	8,248	+15,747	110	54·94
1934-35 .	*17·11	5,94,580	..	95,408	40,186	..	6·76	..	..	..	107	57.88
1935-36 .	17·11	5,94,580	..	1,10,407	49,253	..	8·28	..	..	..	124	55·39
1936-37 .	17·11	5,94,580	..	1,11,722	53,012	..	8·91	..	..	..	126	52·55
1937-38 .	17·11	5,94,580	..	1,12,215	50,577	..	8·50	..	..	..	126	54·93
1938-39 .	17·11	5,96,513	..	1,25,842	57,245	..	9·60	..	..	..	141	54·51

* The Government's financial interest in this Railway has been purchased by the Durbar and this Railway is worked as a subsidiary line on a percentage basis with effect from 1st April 1934.

(*j*) Bombay, Baroda and Central India Railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening	Miles.	Total.
1	2	3	
Broach to Jambusar	23-11-14	29·69	
Jambusar to Kavi	1-8-29	17·87	
Samni to Dehej	1-3-30	24·72	
			72·28

Details of construction—

Permanent way.—The line is laid with second-hand 41½-lb. flat-footed steel rails, partly on sâl and partly on half-round jungle wood sleepers.

Ballast.—The line is being ballasted with sand.

Fencing.—The line is unfenced.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd*

(*j*) Bombay, Baroda and Central India Railway (2′ 6″ gauge)—*contd.*

Details of construction—*contd*

Curves.—The sharpest curve is of 603·8 feet radius on Broach Jambusar Kavi Railway and 995 ft. on Samni Dehej Railway.

Gradients.—The ruling gradient is 1 in 200 on Broach Jambusar Kavi Railway and 1 in 500 on Samni Dehej Railway.

Contracts.—

Main provisions of contract —

These lines are branches of the Bombay, Baroda and Central India Railway and are worked under the contracts noted under Bombay, Baroda and Central India Railway (5′ 6″ gauge).

Statistics of working—

NOTE.—From the year 1936-37 the net earnings/working expenses have been arrived at after taking into account the 'Appropriation to Depreciation Reserve Fund' instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1914-15	29·78	13,28,661	21,756	11,069	0·83	41,525	—30,456	40	49·12
1915-16	29·78	13,95,233	83,433	43.282	3·10	47,294	—4,012	54	48·12
1916-17	29·69	14,10,287	89,083	41,632	2·95	46,241	—4,609	58	53·27
1917-18	29·69	14,17,183	1,40,739	78,180	5·52	49.090	+29,089	91	44·45
1918-19	29·69	14,13,123	1,62,895	1,17,835	8·34	49,265	+68 570	106	27·63
1919-20	29·69	14,14,842	1,62,703	88,937	6·29	48,276	+40,661	105	45·34
1920-21	29·69	14,43,125	1,58,030	82,237	5·70	47,867	+34 370	102	47·96
1921-22	29·69	14,43,668	1,81,047	66,371	4·60	48,916	+17,455	117	63·40
1922-23	29·69	14.59,981	2,11,987	1,24,713	8·54	49,171	+75,542	137	41·17
1923-24	29·69	14.66,338	2,28.070	1,44.965	9·85	49,903	+94.562	148	36·66
1924-25	29·69	14,70,655	2,37,922	1,64,976	11·22	50,120	+1,14,856	154	30·66
1925-26	29·69	15 77,151	2,90.194	2.03,230	12·88	50,315	+1.52.915	187	29·97
1926-27	29·69	17,42,126	1,65,887	84,701	4·86	50,262	+34,439	107	48·94
1927-28	29·69	22,56,073	1,42,874	—13,142	..	50,475	—63,617	93	109·20
1928-29	29·69	27,60,163	1,59,359	73,594	2·67	51,137	+22,457	103	53·82
1929-30	72·12	32,27,244	1,60,083	—24,399	..	97,288	—1,21,687	43	115·24
1930-31	72·28	32,89,999	2,18,484	7,988	0·24	1,52,250	—1,44,262	58	96·34
1931-32	72·28	33,07,877	2,65,057	73,063	2·21	1,53,604	—80,541	71	72·43
1932-33	72·28	33,88,486	2,77,436	46,635	1·38	1,54,254	—1,07,619	74	83·19
1933-34	72·28	34,73,252	2,81,579	82,976	2·38	1,56,612	—73,636	75	70·53
1934-35	72·28	34,79,604	2,88,292	1,08,716	3·12	1,54,334	—45,618	77	62·29
1935-36	72·28	34,82,955	2,54,468	57,263	1·64	1,51,481	—94,218	68	77·49
1936-37	72·28	34,89,812	2,71,167	78,276	2·21	1,47,171	—68,895	72	71·17
1937-38	72·28	35,08,363	2,36,318	72,865	2·08	1,46,321	—73,456	63	69·16
1938-39	72·28	35.51,086	3.27,989	1,21,296	3·42	1,46,509	— 25,213	87	63·02

(*k*) Guzerat-Champaner-Shivrajpur-Pani Light railway (2′ 6″ gauge)—

Agents.—MESSRS. KILLICK, NIXON & CO., BOMBAY

Date of registration of the Company.—30th March 1911.

The maintenance and working of the Champaner-Shivrajpur-Pani Light, Godhra-Lunavada and Nadiad-Kapadvanj railways, which were owned by the Guzerat Railways Company, were taken over by the Bombay, Baroda and Central India Railway Company, with effect from the 1st April 1922.

The Champaner-Shivrajpur-Pani Light railway was constructed by the Shivrajpur Syndicate, Limited, of Bombay, under the Indian Tramways Act, 1886 (XI of 1886) and acquired by the Guzerat Railways Company, with effect from the 1st April 1915. The Indian Railways Act, 1890 (IX of 1890), was applied to it from the 23rd March 1916, when the tramway order, under which the line was constructed, was revoked.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Champaner Road Junction to Shivrajpur	24-1-11	17·16		
Shivrajpur to Ghanta	2-4-15	5·94		
Ghanta to Nathpura	25-5-16	3·11		
Nathpura to Pani	15-11-16	4·47		
TOTAL	..		30·68	

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM - *contd.*

(*k*) Guzerat Champaner-Shivrajpur-Pani Light railway (2′ 6″ gauge) - *contd.*

Details of construction—

Permanent-way.—The permanent-way consists of 29½-lb. steel rails on wooden sleepers and 30-lb, rails on steel sleepers.

Ballast.—The line is ballasted with heavy stone ballast.

Fencing.—The line is unfenced except at station yards.

Curves.—The sharpest curve is of 716 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Contracts and agreement—

Contract, dated the 30th April 1914 (called the principal contract), *between the Secretary of State and the Guzerat Railways Company*, as to the construction, maintenance, management and working of the Godhra-Lunavada and Nadiad-Kapadvanj Railways by the Guzerat Railways Company.

Agreement, dated the 1st April 1915, *between the Guzerat Railways Company, Limited, and the Shivrajpur Syndicate, Limited, of Bombay,* as to the acquisition by the Company of the Champaner-Shivrajpur Tramway and its extension to Pani, as from the 1st April 1915.

Contract, dated the 6th December 1917, *between the Secretary of State and the Guzerat Railways Company*, modifying the principal contract of the 30th April 1914, for maintenance and working of the Champaner-Shivrajpur-Pani Light railway on the terms and conditions applicable to the Godhra-Lunavada and Nadiad-Kapadvanj railways.

Contract dated the 9th November 1929, *between the Secretary of State and the Guzerat Railways Company*, modifying the principal Contract of the 30th April 1914 and Supplemental Contract, dated 6th December 1917, as to the working of the Guzerat Railways with effect from 1st April 1922.

Contract dated the 16th October 1930, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the working of the Guzerat Railways with effect from the 1st April 1922.

Contract dated the 1st April 1915, *between the Guzerat Railways Company, Limited and the Shivrajpur Syndicate, Limited*, as to the conveyance of the Shivrajpur Syndicates ore by the Railways.

Corrigendum dated the 14th November 1932, to the Contract dated the 9th November 1929, *between the Secretary of State and the Guzerat Railway Company, Limited.*

Contract dated the 22nd March 1933, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, modifying the Contract dated the 16th October 1930.

Main provisions of contract and agreement—

(i) *Land.*—Land in British territory provided by the Government free of cost to the Guzerat Railways Company including land permanently or temporarily required for quarrying, ballast, brick fields and kindred purposes.

(ii) *Government aid.*—The Government allow to the Guzerat Railways Company in respect of each year by way of rebate, a sum not exceeding the net earnings from all traffic, except the earnings derived from the carriage of stores, interchanged between the Bombay, Baroda and Central India railway, and the Railways of the Guzerat Railways Company, as shall, together with the net earnings of the Guzerat Railways Company, make up an amount equal to interest for the year at the rate of 5 per cent. per annum on the paid up share capital of the Guzerat Railways Company. Provided that before any calculations are made for the purpose of rebate, interest on loans sanctioned by the Secretary of State for Capital expenditure will first be deducted from the net earnings of the Railways of the Guzerat Railways Company. The Government also allow to the Guzerat Railways Company a sum of rupees seven thousand and two hundred per annum towards the rent of the office of Guzerat Railways Company and of their Managing Agents and for establishment charges, etc., incurred in the same office in addition to the actual expenses incurred for Directors' fees, travelling expenses, etc., and other miscellaneous expenses.

(iii) *Terms of working.*—The Government manage, work, stock and maintain the line through the Agency of the Bombay, Baroda and Central India Railway. The Guzerat Railways are debited with the actual cost of working their lines and a share of working expenses at Nadiad, Godhrda and Champaner Road Junctions as well as a contribution to the Bombay, Boroda and Central India Railway Company's provident fund calculated on the same basis as obtains on the Bombay, Baroda and Central India Railway and a sum of Rupees two thousand and two hundred per annum for the conveyance of their earnings to Bombay *plus* a sum equal to 12½ per cent. on the total working expenses for the year but not less than rupees three hundred per mensem to cover the cost of superintendence and general expenses of management and audit. An amount not exceeding 90 per cent. of the net earnings of the line is paid over to the Guzerat Railways Company quarterly subject to adjustment at the end of the year.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*k*) Guzerat-Champaner-Shivrajpur-Pani Light Railway (2′ 6″ gauge)—*concld.*

Main provisions of contract and agreement—*concld.*

(iv) *Distribution of profits.*—When the net earnings of the Guzerat Railways Company in any year exceed the minimum amount sufficient to give a return of 5 per cent. per annum on the paid up share capital of the Guzerat Railways Company such excess is to be divided equally between the Government and the Guzerat Railways Company.

(v) *Rates and fares.*—Such as may from time to time be agreed upon between the Government, the Guzerat Railways Company and the Working Agency and the classification of goods to be in conformity with that from time to time in force on the Bombay, Baroda and Central India Railway, subject to special rates being charged by the Company for the carriage of ore of the Shivrajpur Syndicate Ltd., in accordance with clause 6 of the contract, dated 16th October 1930, pertaining to the working of the line.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.
(*b*) Government bullion and coin, and the persons in charge thereof.

} To be conveyed at the same rates and under the same arrangements as apply to the Bombay, Baroda and Central India Railway.

(vii) *Power of the Government to determine agreement.*—The Government may, by giving twelve months "notice of purchase," determine the contract on the 31st March 1944 or on the 31st March in the last year of any subsequent period of ten years.

If the contract is determined by "notice of purchase" the Government shall pay to the Guzerat Railways Company 25 times the amount of the average net earnings (excluding payments on account of rebate) derived by the Guzerat Railways Company during the three years immediately preceding the time at which the contract shall be determined, provided that such sum shall not exceed by more than 20 per cent. the total capital expenditure by the Company nor be less than such capital expenditure.

The Government may also, by giving twelve months "notice of special purchase," determine the contract at any time in the following cases :—

(*a*) when it is considered desirable that the gauge of the railway should be altered ;
(*b*) when it is considered desirable to convert the railway into a line of through communication, and
(*c*) when it is considered desirable to extend the railway (without altering the gauge or making the line part of a through route), and the Guzerat Railways Company is unable or unwilling to supply the necessary capital for such extension.

If the contract be determined by "notice of special purchase," the Government to pay to the Guzerat Railways Company 25 times the average net earnings (excluding payment on account of rebate) of the Guzerat Railways Company during the last preceding three years or 115 per cent. of the total capital expenditure of the Guzerat Railways Company, whichever may be the greater.

(viii) *Power of the Guzerat Railways Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vi)].—None specified.

Statistics of working. (Those for the periods prior to 1913–14 will be found in Appendix 1 to the Railway Administration Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from (+), or share of surplus profits to (—) the Government of India.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14	20·24	9,38,663	86,769	25,223	2·68	..	25,223	2·68	82	70·93
1914-15	20·24	14,08,254	64,064	174	0·01	..	174	0·01	61	99·73
1915-16	24·95	15,27,336	74,279	17,242	1·12	+30,433	47,675	3·12	58	76·68
1916-17	32·40	16,37,579	95,325	27,919	1·71	+19,867	47,786	2·92	56	70·71
1917-18	32·40	16,25,532	1,25,762	39,366	2·42	+40,446	79,812	4·91	74	68·70
1918-19	32·40	16,25,532	1,28,996	27,157	1·66	+53,447	80,604	4·94	56	78·94
1919-20	32·40	16,56,445	1,63,874	35,634	2·15	+46,052	81,755	4·93	97	78·26
1920-21	33·49	16,77,405	2,06,943	55,345	3·30	+27,889	83,234	4·97	119	73·26
1921-22	33·49	20,02,508	1,32,770	—24,394	..	+1,17,060	92,658	4·63	76	118·37
1922-23	33·49	20,17,485	2,17,518	79,209	3·94	+33,656	1,12,865	5·62	125	63·58
1923-24	30·68	20,57,036	2,27,824	32,881	1·59	+81,036	1,13,917	5·54	143	85·57
1924-25	30·68	20,67,703	2,06,267	54,116	2·62	+58,181	2,12,297	5·43	129	73·76
1925-26	30·68	20,94,008	1,99,298	45,576	2·18	+73,587	1,19,123	5·69	125	77·13
1926-27	30·68	20,98,504	1,75,250	32,113	1·53	+87,803	1,19,916	5·71	110	81·67
1927-28	30·68	21,00,314	1,96,497	70,950	3·38	+48,940	1,19,890	5·71	123	63·89
1928-29	30·68	20,95,534	2,00,464	63,698	3·04	+52,608	1,16,306	5·55	126	68·22
1929-30	30·68	20,95,843	1,71,861	40,668	1·94	+75,671	1,16,339	5·55	108	76·33
1930-31	30·68	20,99,191	1,44,160	21,540	1·02	+95,437	1,16,977	5·57	90	85·06
1931-32	30·68	21,06,400	1,20,551	—3,828	..	+1,22,577	1,18,739	5·64	76	103·18
1932-33	30·68	21,06,440	78,719	—67,931	..	+1,54,115	86,184	4·09	49	186·29
1933-34	30·68	21,06,280	86,774	—13,199	..	+1,30,896	1,17,697	5·58	54	115·21
1934-35	30·68	21,06,169	84,776	—27,978	..	+1,39,851	1,11,873	5·31	53	133·00
1935-36	30·68	21,08,999	92,047	—28,734	..	*+1,40,712	1,11,978	5·31	58	131·22
1936-37	30·68	21,05,806	1,14,742	§—423	§..	*§+1,12,233	1,11,810	5·31	72	§100·37
1937-38	30·68	21,05,722	1,44,078	—7,605	..	*+1,19,402	1,11,797	5·31	90	105·27
1938-39	30·68	21,05,722	85,438	—21,697	..	*+1,33,468	1,11,771	5·31	54	125·39

*Excludes Office allowances and managing agency expenses paid to the Company.
§Revised Figure.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*l*) Guzerat-Godhra-Lunavada railway (2′ 6″ gauge).

Agents.—MESSRS. KILLICK, NIXON & CO., BOMBAY.

Date of registration of the Company.—30th March 1911.

The construction of this line by the Guzerat Railways Company was sanctioned by the Railway Board in their letter No. 731-R.C., dated the 13th March 1912. Its maintenance and working were taken over by the Bombay, Baroda and Central India Railway Company, with effect from the 1st April 1922.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Godhra to Lunavada Road	4-12-13	24·06	
Lunavada Road to Lunavada	1-9-14	1·43	
TOTAL	..	..	25·49

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed rails on steel trough sleepers I. S. K. pattern.

Ballast.—The line is laid on coarse and hard sand ballast, covered with quartz ballast.

Fencing.—Only certain station yards have been fenced.

Curves.—The sharpest curve has a radius of 600 feet.

Gradients.—The ruling gradient is 1 in 100.

Contracts, etc.

Main provisions of contract, etc.— } The same as noted under the Guzerat Champaner-Shivrajpur-Pani Light Railway.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from (+), or share of surplus profits payable to (—), the Government of India.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14	24·00	11,39,708	13,289	1,860	0·16	..	1,860	0·16	32	86·00
1914-15	25·45	13,02,936	45,407	4,528	0·34	+38,069	42,597	3·27	34	90·03
1915-16	25·45	12,90,052	52,342	—3,559	..	+66,906	63,347	4·91	39	106·80
1916-17	25·45	12,91,980	64,344	10,280	0·77	+53,019	63,299	4·90	49	84·02
1917-18	25·45	12,97,473	54,500	—3,537	..	+67,241	63,704	4·91	41	106·49
1918-19	25·45	13,07,219	78,692	14,796	1·13	+49,839	64,635	4·94	59	81·20
1919-20	25·45	13,15,164	88,175	12,534	0·95	+52,385	64,918	4·93	66	85·70
1920-21	25·45	13,23,629	1,11,617	25,174	1·90	+38,053	63,227	4·78	84	77·45
1921-22	25·45	13,41,131	1,07,671	12,376	0·92	+58,040	70,414	5·25	82	88·51
1922-23	25·45	13,60,666	1,17,168	10,308	0·76	+64,715	75,023	5·56	89	91·20
1923-24	25·44	13,47,820	1,12,205	12,931	0·95	+61,086	74,017	5·49	85	88·48
1924-25	25·43	13,71,460	1,13,277	41,743	3·04	+32,374	74,117	5·40	86	63·15
1925-26	25·43	13,83,530	1,17,926	23,418	1·69	+55,288	78,706	5·69	89	80·14
1926-27	25·43	13,91,284	1,06,723	14,971	1·08	+64,532	79,503	5·71	81	85·97
1927-28	25·43	13,94,374	1,21,287	26,010	1·87	+53,585	79,595	5·71	92	78·55
1928-29	25·43	14,08,830	1,63,230	46,489	3·30	+31,704	78,193	5·55	123	71·52
1929-30	25·43	14,11,427	1,25,717	28,688	2·03	+49,659	78,347	5·55	95	77·18
1930-31	25·49	14,16,103	1,05,807	11,825	0·83	+67,088	78,913	5·57	80	88·22
1931-32	25·49	14,16,293	84,922	23,421	1·65	+55,556	78,977	5·57	64	72·42
1932-33	25·49	14,16,318	89,006	—1,855	..	+59,801	57,946	4·09	67	102·08
1933-34	25·49	14,16,318	75,826	20,396	1·44	+58,747	79,143	5·58	57	73·10
1934-35	25·49	14,16,314	79,337	4,135	0·29	+71,085	75,220	5·31	60	94·79
1935-36	25·49	14,16,314	1,01,458	19,696	1·39	*+55,488	75,184	5·31	62	80·59
1936-37	25·49	14,19,636	1,02,690	31,784	2·24	*+43,591	75,375	5·31	77	69·05
1937-38	25·49	14,19,636	1,12,558	34,606	2·44	*+40,765	75,371	5·31	85	69·25
1938-39	25·49	14,20,704	1,16,204	12,206	0·86	*+63,205	75,411	5·31	88	89·50

* Excludes office allowances and managing agency expenses paid to the Company.

(*m*) Guzerat-Nadiad-Kapadvanj railway (2′ 6″ gauge).

Agents.—MESSRS. KILLICK, NIXON & CO., BOMBAY.

Date of registration of the Company.—30th March 1911.

The construction of this line by the Guzerat Railways Company was sanctioned by the Railway Board in their letter No. 546-R.C., dated the 28th February 1911. Its maintenance and working were taken over by the Bombay, Baroda and Central India Railway Company, with effect from the 1st April 1922.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(*m*) Guzerat-Nadiad-Kapadvanj railway (2′ 6″ gauge)—*concld.*

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
A point near Nadiad station to Kapadvanj	5-3-13	28·18	28·18

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed rails laid on steel trough sleepers Indian State Railway pattern.

Ballast.—The line is ballasted throughout with heavy laterite.

Fencing.—The line is unfenced, except in station yards.

Curves.—The sharpest curve is of 716 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Contract, etc.—
Main provisions of contract.— The same as noted under Guzerat-Champaner-Shivrajpur-Pani Light railway.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 1 to the Railway Administration Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings	Percentage of net earnings on total capital outlay given in column (3).	Rebate from (+), or share of surplus profits to (—), the Government of India.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenes to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14	27·86	12,50,471	1,02,727	41,218	3·30	..	41,218	3·30	70	59·88
1914-15 .	27·86	13,42,442	1,19,495	39,421	2·93	+4,467	43,888	3·27	82	67·01
1915-16 .	27·86	14,68,525	1,33,696	56,086	3·82	+16,026	72,112	4·91	92	58·05
1916-17	28·01	15,11,305	1,44,523	69,816	4·63	+4,229	74,045	4·90	99	51·69
1917-18	28·01	14,89,403	1,57,709	73,940	4·96	—812	73,128	4·91	108	53·12
1918-19	28·01	14,98,441	2,05,496	1,11,661	7·45	—37,572	74,089	4·94	141	45·66
1919-20 .	28·01	14,83,341	2,23,476	1,17,547	7·92	—44,332	73,215	4·93	153	47·40
1920-21	30·06	15,17,671	2,57,922	1,36,559	8·99	—61,880	74,679	4·92	165	47·05
1921-22 .	30·06	17,12,536	2,38,789	1,03,424	6·04	—20,255	83,169	4·86	153	56·69
1922-23 .	30·06	16,05,302	2,59,809	1,32,452	8·37	—44,312	88,140	5·57	162	49·02
1923-24 .	28·17	15,41,877	2,88,475	1,28,031	8·18	—43,191	84,840	5·50	197	55·62
1924-25 .	28·17	15,92,605	3,10,860	1,91,964	12·05	—98,201	93,763	5·88	212	38·25
1925-26 .	28·17	16,17,567	3,00,487	1,55,561	9·62	—63,542	92,019	5·69	205	48·23
1926-27 .	28·17	16,22,407	2,62,265	1,30,297	8·03	—37,587	92,710	5·71	179	50·32
1927-28 .	28·17	16,24,441	2,46,250	1,03,427	6·37	—10,701	92,726	5·71	168	58·00
1928-29	28·17	16,26,903	2,44,229	1,07,018	6·58	—16,722	90,296	5·55	167	56·18
1929-30	28·17	16,26,776	2,13,137	69,694	4·28	+20,608	90,302	5·55	146	67·30
1930-31 .	28·18	16,28,698	1,80,494	11,363	0·69	+79,406	90,759	5·57	123	93·71
1931-32 .	28·18	16,28,842	1,70,340	35,861	2·20	+54,966	90,827	5·58	116	78·95
1932-33 .	28·18	16,28,842	2,06,527	11,592	0·71	+55,051	66,643	4·09	141	94·39
1933-34 .	28·18	16,28,828	2,36,184	80,776	4·95	+10,241	91,017	5·58	161	65·80
1934-35 .	28·18	16,29,556	2,14,947	40,836	2·51	+45,753	86,589	5·31	147	81·00
1935-36 .	28·18	16,29,556	2,58,504	83,370	5·11	*+3,175	86,545	5·31	176	67·75
1936-37 .	28·18	16,29,655	2,78,381	1,20,598	7·40	*—34,072	86,526	5·31	190	56·68
1937-38 .	28·18	16,30,188	2,62,489	98,825	6·06	*—12,275	86,550	5·31	179	62·35
1938-39 .	28·18	16,30,216	2,65,190	82,234	5·04	*+4,298	86,532	5·31	181	68·99

* Excludes office allowances and managing agency expenses paid to the Company.

(*n*) Piplod Devgad Baria railway (2′ 6″ gauge)—

Progress in opening—

Section of Railway.	Date of opening.	Miles.	Total.
1	2	3	4
Piplod to Devgad Baria	1-1-29	9·52	9·52

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails British Standard section weighing 35 lbs. per L. yd. 30 feet long on steel trough sleepers.

Ballast.—The line is ballasted with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1146·3 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

Agreement dated the 17th December 1929 between the Baria State and the Bombay, Baroda and Central India Railway Company as to the maintenance and working of the Piplod-Devgad Baria Railway with effect from the 1st January 1929.

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*contd.*

(n) Piplod Devgad Baria railway (2′ 6″ gauge)—*concld.*

Main provisions of agreement.—

(i) *Land.*—Provided free of cost by the Baria State.

(ii) *Government aid.*—Nil. The line with its rolling stock is the property of the Baria State (which provides all funds chargeable to the Capital account) and is managed, maintained and worked by the Bombay, Baroda and Central India Railway as part of the Company's system.

(iii) *Terms of working—*
(iv) *Distribution of profits—* The Piplod-Devgad-Baria Railway is debited with the actual cost of working and a share of the working expenses at Piplod junction *plus* a sum equal to 12½ per cent. on total working expenses in the half-year for supervision, but such supervision shall not be levied unless the net earnings of the Piplod-Devgad-Baria Railway give a clear return of 3½ per cent. per annum on the Capital cost of the line, and then only to the extent that the balance of the net earnings may permit after a clear return of 3½ per cent. per annum has been allowed to the Piplod-Devgad-Baria Railway on the total capital expended, and in addition thereto a contribution from its net earnings to the Company's Provident Fund calculated on the same basis as obtains on the Bombay, Baroda and Central India Railway. The balance in favour of, or against the Baria State is paid over to, or by it, as the case may be, every half-year, the payment for the first half-year being subject to adjustment at the end of the year.

(v) *Rates and fares.*
(vi) *Special obligations as to the conveyance of—*
(*a*) Mails, troops, high Government officials and Government Stores.
(*b*) Government bullion and coin, and persons in charge thereof.
(vii) *Power of the Baria State to determine agreement.*
(viii) *Power of the Company to determine agreement.*
(ix) *Terms of agreement if not determined under (vii) and (viii).*

As noted under Rajpipla State Railway.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1928-29 . .	9·52	7,00,670	6,365	—1,306	—0·19	13	120·52
1929-30 . .	9·52	8,45,413	53,428	26,739	3·16	108	49·95
1930-31 . .	9·52	8,80,996	63,764	30,212	3·42	129	52·62
1931-32 . .	9·52	8,90,221	80,620	40,247	4·52	163	50·08
1932-33 . .	9·52	9,46,154	79,984	38,096	4·03	162	52·37
1933-34 . .	9·52	9,47,939	72,209	27,334	2·88	146	62·15
1934-35 . .	9·52	9,73,217	82,946	36,397	3·73	167	56·12
1935-36 . .	9·52	9,76,666	77,366	30,133	3·08	156	61·05
1936-37 . .	9·52	9,76,927	76,601	35,874	3·67	155	53·17
1937-38 . .	9·52	9,76,987	68,945	29,919	3·06	139	56·60
1938-39 . .	9·52	9,77,251	67,959	30,560	3·13	137	55·03

(o) Rajpipla State Railway (2′ 6″ gauge).

Progress in opening—

Sections of Railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Anklesvar to Raj-Pardi	1-7-97	19·13		
Raj-Pardi to Umalla	19-1-99	4·95		
Umalla to Amletha	1-6-99	7·85		
Amletha to Nandod station	20-7-99	5·57		
Nandod station to Nandod town	10-11-17	1·74		
			39·24	
Jhagadia to Netrang	1-3-32	19·13		
			19·13	
TOTAL OPEN MILEAGE . .	..	..		58·37

Details of construction—

Permanent-way.—The line is laid with 41½-lb. flat-footed steel and iron rails on half-round jungle teak Sal and Australian sleepers.

Ballast.—The line is ballasted chiefly with coarse river sand.

Fencing.—Only the station yards.

Curves.—The sharpest curve is of 1,432 feet radius on the Rajpipla State Railway and 478 feet radius on the Jhagadia Netrang Railway.

Gradients.—The ruling gradient on the Rajpipla State Railway is 1 in 150. Between Nandod Station and Nandod Town it is 1 in 100. The ruling gradient on the Jhagadia Netrang Railway is 1 in 75,

4. BOMBAY, BARODA AND CENTRAL INDIA RAILWAY SYSTEM—*concld.*

(o) Rajpipla State railway (2′ 6″ gauge)—*concld.*

Contracts and agreement—

Contract, dated the 8th April 1907, *between the Secretary of State and the Bombay, Baroda and Central India Railway Company*, as to the management, maintenance and working, as from the 1st January 1906, of the Bombay, Baroda and Central India, the Rajputana-Malwa and other subsidiary lines.

Agreement, dated the 19th November 1917, *between the Rajpipla State and the Bombay, Baroda and Central India Railway Company*, superseding as from the 10th November 1917, the agreement to 19th March 1900, as to the maintenance and working of the Rajpipla State railway.

The terms of working Jhagadia Netrang Railway have not yet been settled. When the terms are settled between the Rajpipla State and the B. B. and C. I Railway an agreement will be drawn up and submitted to the Railway Board for ratification.

Main provisions of contract and agreement—

(i) *Land.*—Provided free of cost by the Rajpipla State.

(ii) *Government aid.*—Nil. The line with its rolling stock is the property of the Rajpipla State (which provides all funds chargeable to the capital account), and is managed, maintained and worked by the Bombay, Baroda and Central India railway as part of the Company's system.

(iii) *Terms of working.*
(iv) *Distribution of profits.*
} The Rajpipla State railway is debited with the actual cost of working and a share of the working expenses at Anklesvar Junction, *plus* a sum equal to 12½ per cent. on total working expenses in the half-year for supervision, but such supervision shall not be levied unless the net earnings of the Rajpipla State railway give a clear return of 3½ per cent. per annum on the capital cost of the line, and then only to the extent that the balance of the net earnings may permit after a clear return of 3½ per cent. per annum has been allowed to the Rajpipla State railway on the total capital expended, and in addition thereto a contribution from its net earnings to the Company's Provident Fund calculated on the same basis as obtains on the Bombay, Baroda and Central India railway. The balance in favour of, or against, the Rajpipla State is paid over to, or by it, as the case may be, every half year, the payment for the first half year being subject to adjustment at the end of the year.

(v) *Rates and fares.*—Are to be fixed from time to time by the Company in communication with and subject to the approval of His Highness' Government.

(vi) *Special obligations as to the conveyance of—*
(*a*) Mails, troops, high Government officials and Government stores.
(*b*) Government bullion and coin, and the persons in charge thereof.
} As under Petlad-Cambay railway (Anand-Tarapur section).

(vii) *Power of the Rajpipla State to determine agreement.*
(viii) *Power of the Company to determine agreement.*
} The agreement may be determined by either party, on one year's notice from either side expiring on the 31st March of any year.

(ix) *Term of agreement* [*if not determined under* (vii) *and* (viii)].—Not specified.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs		Rs.	
1913-14	37·37	14,18,501	1,29,663	45,365	3·20	67	65·01
1914-15	37·37	14,29,469	1,28,585	49,678	3·48	66	61·37
1915-16	37·37	14,72,251	1,28,696	58,794	3·99	66	54·32
1916-17	37·50	16,26,463	1,18,809	50,529	3·11	61	57·47
1917-18	39·24	17,13,068	1,35,561	49,849	2·91	66	63·23
1918-19	39·24	17,27,649	1,62,933	68,346	3·96	80	58·05
1919-20	39·24	17,33,108	1,58,857	46,388	2·68	78	70·80
1920-21	39·24	17,40,975	1,69,299	48,037	2·76	83	71·63
1921-22	39·24	17,57,913	1,62,938	21,869	1·24	80	86·58
1922-23	39·24	17,66,512	1,98,899	61,677	3·49	97	68·99
1923-24	39·24	17,70,871	2,49,305	1,17,011	6·61	122	53·06
1924-25	39·24	17,78,671	2,67,175	1,37,304	7·72	131	48·61
1925-26	39·24	17,99,606	3,09,265	1,51,242	8·40	152	51·10
1926-27	39·24	18,17,731	2,21,607	74,338	4·09	109	66·46
1927-28	39·24	18,36,700	2,17,055	74,638	4·06	106	65·61
1928-29	39·24	18,39,332	2,32,957	65,465	3·56	114	71·90
1929-30	39·24	18,50,579	2,33,006	61,309	3·31	114	73·69
1930-31	39·24	18,58,774	2,41,164	72,911	3·92	118	69·77
1931-32	58·06	*18,70,622	2,31,046	66,239	3·54	77	71·33
1932-33	58·06	*18,80,642	2,50,259	74,457	3·96	83	70·25
1933-34	58·06	*18,91,468	2,57,021	83,391	4·40	85	67·55
1934-35	58·06	*18,94,947	2,27,848	51,546	2·72	75	77·38
1935-36	58·37	*19,21,391	2,38,889	65,650	3·41	78	72·52
1936-37	58·37	*19,39,680	2,73,506	75,600	3·90	90	72·36
1937-38	58·37	*19,43,912	2,69,437	30,678	1·58	89	88·61
1938-39	58·37	*19,53,385	2,90,176	91,509	4·68	96	68·46

* The amount of Capital expenditure incurred on the Jhagadia Netrang Railway is not yet known from the Durbar.

5. EASTERN BENGAL RAILWAY SYSTEM.

The lines owned by the late Eastern Bengal Guaranteed Railway Company were acquired by the State on the 1st July 1884, with which the Northern Bengal State and the Calcutta and South Eastern railways were amalgamated for working by the State as one undertaking under the name of the Eastern Bengal railway.

Date of registration of the late guaranteed company.—1857.

Lines comprised in the system.—The Eastern Bengal railway system is made up of—

	Open line. Miles.	Under construction or sanctioned for construction. Miles.	Total Miles.
(*a*) Eastern Bengal Railway (5′ 6″ gauge)	846·31	..	846·31
(*b*) Sara-Sirajganj Railway (5′ 6″ gauge)	53·98	..	53·98
(*c*) Eastern Bengal Railway (3′ 3½″ gauge)	1,038·28	..	1,038·28
(*d*) Cooch Behar State Railway (3′ 3½″ gauge)	33·09	..	33·09
(*e*) Eastern Bengal Railway (2′ 6″ gauge)	17·14	..	17·14
(*f*) Khulna-Bagerhat Railway (2′ 6″ gauge)	19·75		19·75
Total	2,008·55	..	2,008·55

Running powers—

Foreign line over home line :—

East Indian railway, Naihati to Chitpore, Sealdah and Majherat	39·17
Assam-Bengal railway, Tangi to Narayanganj	23·25
Total	62·42

(a) Eastern Bengal railway (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
EASTERN SECTION—					
Main line—					
Calcutta to Ranaghat	29-9-62	45·78			
Ranaghat to Poradaha Junction	15-11-62	57·12			
Poradaha Junction to Bhairamara	19-1-78	11·73			
Bhairamara to Shakhole (3 miles south of Gopalpur).	1-1-15	14·41			
Shakhole (3 miles south of Gopalpur) to Santahar.	1-11-14	*44·84			*These lengths were originally on the 3′ 3½″ gauge, but were converted to 5′ 6″ gauge and opened on the dates shown.
Santahar to Parbatipur	1-7-24	*59·75			
Parbatipur to Siliguri	30-9-26	*84·94			
Calcutta Chord Railway (over the E. B. Rly.).	1-2-32	†1·43			
Branches—			320·00		
Kakurgachi chord—					
Kakurgachi Road to Junction with High level goods line.	1-2-07	1·48			
High level goods line to Docks	14-6-19	5·45	6·93		
Race course line at Barrackpore	27-1-28	1·54	1·54		
Dum Dum-Chitpore low level connection—	20-10-14	†2·07	2·07		†For goods traffic only.
Murshidabad branch—					
Ranaghat to Bhagwangola	1-9-05	89·60			
Bhagwangola to Krishnapur	10-11-05	5·90			
Krishnapur to Lalgola Ghat	15-7-07	0·92	96·42		
Nashipur Road to Azimganj	31-1-28	**2·01	2·01		**For stone traffic only.
Goalundo extension—					
Poradaha Junction to Jagati	15-11-62	4·84			
Jagati to Kushtia	16-2-64	3·77			
Kushtia to mile 145·74	1-1-71	32·76			
	1-8-81	1·33			
	20-6-11	0·73			
Mile 145·74 to Pachooria Junction	1-4-90	4·57			
Pachooria Junction to Goalundo	26-10-98	5·43	53·43		
TOTAL EASTERN SECTION, CARRIED OVER	..	..	..	482·40	

E. B. RAILWAY SYSTEM.

REFERENCES.

E. B. Railway ..... 5'-6" 3'-3 3/8" 2'-6" & 2'-0"
Indian State lines .....
Private Companies' lines .....
Home, Branch and Local line Junctions .....
Junctions connecting Foreign lines .....

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.

N

DALSINGPARA
JAINTI
SILIGURI
RAJA BHAT KHAWA
RANGAPARA NORTH
TANGLA
RANGIYA
AMINGAON
JOGBANI
LALMANIR-HAT
GOLAKGANJ
KISHANGANJ
PURNEA
BANMANKHI
DHUBRI
MURLIGANJ
RUHEA
TISTA
GITALDAHA
BEHARIGANJ
BARSOI
KURIGRAM
KATIHAR
KANCHAN
KAUNIA
TISTA MUKH GHAT
PARBATIPUR
FULCHHARI
MANIHARI GHAT
BONARPARA
BAHADURABAD
SANTAHAR
SINGHJANI
MYMENSINGH
AMNURA
JAGANNATHGANJ
CHAPAI NAWABGANJ
SIRAJGANJ GHAT
GODAGARI GHAT
SIRAJGANJ RAIPUR
LALGOLA GHAT
ABDULPUR
RAITA
ISHURDI
BHAIRAMARA
TANGI
GOALUNDO
PORADAHA
-GHAT
KALUKHALI
NARAYANGANJ
FARIDPUR
NABADWIP GHAT
MADHUKHALI
PACHOORIA
KRISHNAGAR CITY
KAMARKHALI GHAT
SANTIPUR
BHATEAPARA GHAT
RANAGHAT
NAIHATI
KHULNA
BONGAON
DUM-DUM
RUPSA EAST
CALCUTTA
(SEALDAH)
BAGERHAT
BUDGE-BUDGE
SONARPUR
BARUIPUR
CANNING
DIAMOND HARBOUR
LAKSHMIKANTAPUR

5. EASTERN BENGAL RAILWAY SYSTEM—*contd.*

(*a*) Eastern Bengal railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward, Eastern section .	..	..	..	482·40	
EASTERN SECTION—*concld.*					
Faridpur branch—					
Pachooria Junction to Shivarampore . .	20-10-98	8·77			
Shivarampore to Ambikapur . .	9-4-99	5·19			
Ambikapur to Faridpur	21-10-35	1·54			
			15·50		
Fakirabad Ghat line	5-7-12	1·80			
			1·80		
Raita branch—					
Bhairamara to Raita	1-12-16	8·76			
			8·76		
Churni Bridge to Santipur	31-5-25	10·01			
			10·01		
Abdulpur-Nawabganj Branch—					
Abdulpur-Rajshahi	14-3-29	25·56			
Rajshahi to Chapai Nawabganj . . .	15-1-30	31·59			
			57·15		
Kalukhali-Bhatiapara Branch—					
Kalukhali to Madhukhali	1-1-32	26·28			
Madhukhali to Bhatiapara	1-3-32	27·21			
			53·49		
TOTAL, EASTERN SECTION .	..	..	..	639·11	
SOUTHERN SECTION—					
Main line—					
Calcutta (Beliaghata) to Sonarpur .	2-1-62	10·00			
Sonarpur to Baruipur . . .	10-6-82	5·30			
Baruipur to Magra Hat	18-12-82	9·55			
Magra Hat to Diamond Harbour .	25-4-83	12·13			
			36·98		
Branches—					
Canning branch—					
Sonarpur to Champahati	2-1-62	5·00			
Champahati to Port Canning . . .	15-5-63	12·16			
Bansra diversion extension . .	17-11-02	0·81			
			17·97		
Budge-Budge branch—					
Ballygunge to Budge-Budge . . .	1-5-90	13·38			
Lakshmikantapur Branch—			13·38		
Baruipur to Lakshmikantapur . . .	15-12-28	23·26	23·26		
				91·59	
TOTAL, SOUTHERN SECTION . .	..	..	..		†This was originally the property of the late Bengal Central Railway Company. It was purchased by the State and merged in the Eastern Bengal railway with effect from the 1st July 1905.
CENTRAL SECTION†—					
Main line—					
Dum Dum Junction to Dattapukur . .	2-4-83	14·25			
Dattapukur to Gobardanga . . .	7-12-83	17·00			
Gobardanga to Bongaon	22-4-84	12·00			
Bongaon to Khulna	16-2-84	61·22			
			104·47		
Branches—					
Ranaghat to Bongaon	16-10-82	21·14			
			21·14		
TOTAL, CENTRAL SECTION .	..	..	..	125·61	
TOTAL, OPEN MILEAGE	..	..	..	846·31	
QUADRUPLE LINES—					
On the main line of Eastern section—					
Sealdah to Kakurgachi	18-2-16	0·79			
Kakurgachi to Dum Dum	1-2-07	3·13			
Dum Dum to Barrackpore . . .	12-12-12	10·30			
Barrackpore to Naihati	21-11-12	8·38			
			22·60		
				22·60	
Total carried over	..	..	..	22·60	

5. EASTERN BENGAL RAILWAY SYSTEM—*contd.*

(*a*) Eastern Bengal railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward .	..	..	..	22·60	
DOUBLE LINE—					
On the main line of Eastern section—					
Naihati to Kanchrapara . . .	20-4-92	4·58			
Kanchrapara to Ranaghat . . .	12-11-92	17·56			
Ranaghat to Aranghata . . .	7-8-97	5·50			
Aranghata to Bogoola	17-9-97	6·75			
Bogoola to Majdia	3-11-95	6·65			
	17-11-98	0·75			
	29-11-09	0·15			
Majdia to Dursuna	17-9-97	9·50			
Dursuna to Poradaha . . .	7-8-97	27·58			
Poradaha to Bhairamara . .	27-11-09	0·24			
	17-10-13	6·73			
Bhairamara to Ishurdi Junction .	25-1-15	5·09			
	25-2-15	0·52			
Ishurdi Junction to Abdulpur . .	1-3-32	10·89			
Calcutta Chord railway (over the E. B. Rly.)	1-2-32	1·43			
			113·83		
On the branches of Eastern section—					
Kakurgachi chord—					
Kakurgachi to Gobra . . .	1-2-07	1·64			
High level goods line to Docks . .	14-6-19	4·53			
Dum Dum-Chitpore low level connection, a portion.	10-12-13	1·69	6·17		
			1·69		
Goalundo extension—					
Poradaha Junction to Jagati . .	2-3-15	4·84			
			4·84		
On the main line of Southern section—					
Sealdah to Ballygunge . . .	20-10-88	3·50			
	19-9-90	0·36			
Ballygunge to Jadabpur	10-10-13	1·35			
Jadabpur to Baruipur	23-11-15	10·39			
			15·60		
On the branches of Southern section—					
Budge-Budge branch—					
Ballygunge to Majherat	20-11-93	4·00	4·00		
TOTAL DOUBLE LINE .	..	..	..	146·13	

Details of construction—

The permanent-way consists of 90 lbs. flat-footed steel rails (B. S. and B. S. R. Sections) laid on wooden, steel, cast iron or cement concrete sleepers with the following exceptions :—

(*i*) 115 lbs. flat-footed steel rails laid on wooden sleepers on up and down Quadruple line (from mile 1·25 to 4·60) and C. C. Railway line near Dum Dum junction between miles 1/7 and 4/10, on the Eastern Bengal Railway up and down main lines from mile 0·50 to mile 5·25, up and down tracks from mile 0 of Kakurgachi Chord to 2·9 miles towards mile 5 B.

(*ii*) 75 lbs. flat-footed steel rails laid on wooden concrete N. C. I. sleepers :—

(*a*) On the Murshidabad Branch between Bhabta and Lalgola Ghat.

(*b*) Abdulpur-Nawabganj Branch.

(*c*) Kalukhali-Bhatiapara Branch.

(*iii*) (*a*) 90 lbs. F.F., 75 lbs. and 73 lbs. double headed steel rails laid on D. and O. plates and wooden sleepers on the Raita Branch from Bhairamara to Raita.

(*b*) The line from sub-way at Canal Junction Cabin to Chitpore, is laid partly with 75-lb. double headed and partly with 75-lb. flat-footed rails. A few short lengths near ghat stations at Goalundo are still laid with old iron permanent-way.

(*c*) All flat-footed rails, as a rule, are laid on wooden sleepers, excepting for a few short lengths between Naihati and Poradaha, where cast iron sleepers have been used under 90-lb. rails.

5. EASTERN BENGAL RAILWAY SYSTEM—*contd.*

(*a*) Eastern Bengal railway (5′ 6″ gauge)—*concld*

Details of construction—*concld*

(*d*) The 73-lb. and 75-lb. double-headed rails are laid on Denham and Olphert's cast iron or on wooden sleepers with cast iron chair and wooden keys.

Ballast—The whole of the line except Faridpur, Abdulpur-Nawabganj and Kalukhali-Bhatiapara Branches including Madhukhali Kamarhhali Sections is ballasted with brick stone and shingle.

Fencing.—The whole of the 5′—6″ gauge line is fenced except between Barnipur and Diamond Harbour, Piali and Canning, Churni Junction and Santipur, Kalukhali and Bhatiapara, Madhukhali Junction and Kamarkhali, Pachooria Junction and Goalundo, Pachooria Junction and Faridpur Abdulpur and Chapai Nawabganj, Poradaha Junction and Parbatipur.

On the unfenced sections the Station yards are generally fenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 300 ; except between miles 160 and 164 on the Faridpur branch where it is 1 in 100. There is also a short length of 1 in 200 grade on Raita and Baruipur Lakshmikantapur Branches and on the low level approaches to Chitpore from Dum Dum junction.

Contracts—

Nil.—The line is owned and worked by the State.

Rates and fares.—Certain maxima and mimima have been fixed by the Government, between the limit of which the Railway Administration can vary the rates and fares for goods and coaching traffic.

Statistics of working. (Those for the periods prior to 1888 will be found in Appendix 38 to the Railway Administration Report for 1907.)

NOTE.—The amount of sterling liabilities involved in the purchase of railways, included in the figures shown in column 3 below against 1933-34 and 1934-35, has been converted at the rates of exchange ruling at the time when the liabilities came into being, as against the statutory rate of exchange *i.e.* 1*s* 6*d* previously adopted. From the year 1935-36 onwards the same amount has been reconverted at the latter rate.

INCLUDES THE EASTERN BENGAL RAILWAY 3′ 3¼″ AND 2′ 6″ GAUGE SECTIONS.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay, or capital at charge, given in column (3).	Payment on account of rebate to branch lines.	Interest.	Annuity and Sinking Fund.	Gain or loss to the State pertaining to each year.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	
1888 .	673·21	9,36,48,486	1,05,19,210	55,25,424	5·90	..	28,83,744	20,11,011	+6,30,669	283	47·47
1889 .	746·40	9,73,16,143	1,11,76,674	61,91,625	6·36	..	30,18,703	20,43,953	+11,28,969	282	44·60
1890 .	763·90	10,04,93,109	1,14,78,382	60,70,323	6·04	..	30,96,150	18,14,110	+11,60,063	271	47·12
1891 .	776·57	10,19,64,737	1,26,75,440	65,32,100	6·40	..	32,01,166	19,48,198	+13,82,736	294	48·47
1892 .	812·35	10,48,66,143	1,15,56,446	62,33,727	5·94	..	33,53,707	21,86,396	+ 6,93,624	270	46·06
1893 .	812·71	10,56,47,715	1,20,51,147	66,35,138	6·28	..	33,88,241	22,14,254	+10,32,643	283	44·94
1894 .	812·96	10,61,71,400	1,40,15,726	83,53,559	7·87	..	34,72,411	25,21,063	+23,60,085	314	40·40
1895 .	813·65	10,76,16,616	1,45,09,739	89,74,474	8·34	..	35,12,105	25,10,875	+29,51,494	323	38·15
1896 .	814·39	11,02 05 096	1,50,81,670	90,02,286	8·17	..	35,15,387	23,46,896	+31,40,001	344	40·31
1897 .	817·88	11,51,93,689	1,47,62,233	80,66,993	7·00	..	37,20,343	22,13,438	+21,33,212	336	45·35
1898 .	827·37	11,82,79,108	1,47,17,879	83,35,064	7·05	..	38,62,725	21,01,651	+23,70,688	334	43·37
1899 .	832·18	12,20,74,261	1,56,12,436	83,01,083	6·80	..	39,79,133	20,83,534	+22,38,416	348	46·83
1900 .	843·04	12,62,77,100	1,71,00,460	92,46,424	7·32	..	41,82,033	20,87,252	+29,77,139	376	45·93
1901 .	854·39	13,24,19,708	1,65,99,440	83,08,281	6·27	..	43,55,321	20,93,467	+18,59,493	360	49·95
1902 .	898·18	14,04,06,863	1,78,93,098	91,48,340	6·52	..	46,09,123	20,88,413	+23,90,504	381	48·87
1903 .	897·87	15,21,86,102	1,81,52,429	88,57,094	5·82	..	50,13,335	20,87,434	+17,56,325	375	51·20
1904 .	971·31	16,55,23,769	1,94,03,098	88,23,372	5·33	..	54,62,375	20,87,434	+12,39,966†	374	54·67
1905 .	1,234·98	19,08,88,052	2,03,73,194	96,19,904	5·04	..	59,23,924	20,87,434	+16,08,546	348	52·78
1906 .	1,271·29	20,23,66,593	2,46,31,081	1,06,08,661	5·24	..	68,54,092	20,87,434	+16,67,135	360	56·93
1907 .	1,278·61	21,54,21,452	2,65,68,569	1,03,15,781	4·79	..	63,94,610	20,87,434	+18,33,737	389	61·17
1908 .	1,274·47	22,87,20,095	2,73,15,420	81,99,105	3·58	..	70,30,092	20,87,434	—9,18,421	412	69·98
1909 .	1,503·09	24,27,44,601	2,77,24,064	97,10,666	4·00	..	73,15,941	20,87,434	+3,07,291	355	64·97
1910 .	1,507·73	25,55,91,026	2,83,74,562	1,16,98,257	4·58	..	75,34,551	20,87,434	+20,76,272	366	58·77
1911 .	1,509·62	27,11,51,904	3,15,19,633	1,17,55,233	4·33	..	79,48,531	20,87,434	+17,19,268	402	62·70
1912 .	1,569·83	29,00,69,252	3,03,33,589	1,39,40,687	4·81	..	84,00,089	20,87,434	+34,53,184	429	59·40
1st qr. of 1913.	1,571·68	27,69,63,503	89,52,207	34,79,977	1·26	..	21,70,558	25,21,859	+7,87,560	438	61·13
1913-14 .	1,581·43	32,69,88,602	3,75,42,065	1,66,52,046	5·09	..	1,04,87,669	20,87,434	+40,76,943	460	55·64
1914-15 .	1,639·65	35,01,65,002	3,32,49,234	1,14,97,734	3·28	..	1,12,22,483	20,87,434	—18,12,188	401	65·42
1915-16 .	1,638·91	35,98,80,436	3,48,23,835	1,37,75,460	3·83	..	1,17,12,779	20,87,434	—24,753	409	60·44
1916-17 .	1,627·88	36,29,18,133	3,69,89,330	1,68,75,235	4·68	97,751	1,15,44,512	19,68,750	+32,64,222	437	54·38
1917-18 .	1,582·08	36,53,74,519	3,47,38,908	1,46,36,653	4·08	2,96,084	1,22,11,213	19,75,155	+1,54,196	405	57·87
1918-19 .	1,581·17	36,70,93,248	3,86,33,466	1,62,26,318	4·42	2,96,258	1,22,96,902	19,15,155	+17,17,998	470	58·00
1919-20 .	1,632·79	38,05,62,605	4,44,48,508	1,43,63,557	3·77	1,91,187	1,25,07,548	19,23,705	—3,48,883	523	67·68
1920-21 .	1,631·77	‡40,11,63,000	4,67,60,315	1,65,96,829	4·11	42,585	1,26,88,894	14,95,998	+23,69,352	551	64·50
1921-22 .	1,629·70	‡41,28,87,888	4,37,78,742	61,09,959	1·48	62,505	1,85,73,746	19,18,922	—94,45,214	517	86·04
1922-23 .	1,621·74	‡41,97,00,440	5,21,52,581	80,78,580	1·93	85,624	1,38,51,159	20,32,735	—78,90,938	618	84·50
1923-24 .	1,622·06	‡48,43,70,532	5,38 49,998	1,43,68,639	3·31	27,031	1,42,88,210	19,37,594	—18,84,796	689	73·32
1924-25 .	1,616·07	‡41,71,15,167	6,02,90,980	1,72,45,206	4·13	1,208	1,56,07,281	§	+16,36,657	717	71·40
1925-26 .	1,603·68	‡42,75,73,127	6,32,07,915	1,69,58,954	3·97	—13,945	1,59,60,150	..	+10,12,749	759	73·17
1926-27 .	1,611·08	‡43,13 19,331	6,81,73,614	2,33,32,599	5·41	8,640	1,61,52,493	..	+71,71,466	815	65·78
1927-28 .	1,635·92	‡44,88,16,877	7,05,06,845	2,44,23,908	5·44	—164	1,68,45,617	..	+75,78,348	841	65·36
1928-29 .	1,748·22	‡46,56,33,155	7,11,62,656	2,34,82,736	5·04	17,412	1,79,98,301	..	+54,67,023	814	67·00
1929-30 .	1,760·86	‡48,57,28,852	6,74,29,900	2,05,53,728	4·23	—4,102	1,86,83,587	..	+18,74,243	736	69·51
1930-31 .	1,791·23	‡50,82,12,458	5,78,13,727	1,12,06,026	2·26	—74,217	1,99,84,814	..	—88,53,005	620	80·62
1931-32 .	1,844·98	51,34,71,000	5,02,51,934	79,14,599	1·54	52,301	2,03,33,047	..	—1,24,70,749	524	84·25
1932-33 .	1,895·16	51,61,71,174	4,97,08,578	76,82,853	1·49	2,01,870	2,03,83,750	..	—1,29,02,767	504	85·54
1933-34 .	1,895·15	50,98,87,937	5,10,74,202	77,85,122	1·52	3,21,137	2,01,76,620	..	—1,27,12,634	517	84·76
1934-35 .	1,900·95	51,10,05,558	5,47,31,220	1,06,84,260	2·09	2,07,869	1,97,86,848	..	+93,10,457	552	80·48
1935-36 .	1,902·49	51,59,89,399	5,31,36,694	80,55, 8	1·56	1,90,764	1,96,91,233	..	—1,18,26,319	534	84·84
1936-37 .	1,902·49	51,48,09,034	5,76,83,997	1,19,21,241	2·32	1,54,494	1,94 20,679	..	—76,53,932	581	79·33
1937-38 .	1,902·49	51,48,69,078	5,81,77,235	1,14,93,960	2·23	36,510	1,92,96,048	..	—78,38,598	586	80·24
1938-39 .	1,901·73	51,71 14,997	5,94,12,306	98,53,772	1·91	1,53,759	1,92,79,881	..	—95,79,868	601	83·41

†Excluding Rs. 33,597, representing payment made to the Brahmaputra-Sultanpur Branch Railway Company up to 1st April 1904 on account of surplus profits and other adjustments.

‡ Including premia paid by Government in the purchase of the line.

§ The Capital account was permanently debited with the balance of Capital liability outstanding on 31st March 1924 in respect of the purchase of the railway under redemption by annuities and sinking fund on which full interest is charged in column 8.

5. EASTERN BENGAL RAILWAY SYSTEM—*contd.*

(*b*) Sara-Sirajganj railway (5′ 6″ gauge)—

Managing Agents.—MESSRS. GILLANDERS ARBUTHNOT AND CO., CALCUTTA.

Date of registration of the Company.—1913.

The construction of this line by the Eastern Bengal Railway on behalf of the Sara-Sirajganj Railway Company was sanctioned in Railway Board's Notification No. 277, dated the 10th October 1913. The line takes off at Ishurdi in an easterly direction and terminates at Sirajganj on the banks of the Jamuna which is the local name for the Brahmaputra river.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Ishurdi to Bhangoora	1-7-15	21·25	
Bhangoora to Sirajganj Ghat	25-7-16	28·41	
	10-11-34	4·32	
TOTAL.	..	..	53·98

Details of construction—

Permanent-way.—The permanent-way consists of 90-lb. flat-footed steel rails laid on wooden sleepers on the main line and passenger sidings. The permanent-way on the Sirajganj Ghat line consists of 90 lbs. F.F. and 75-lb. double-headed rails. Flat-footed rails are laid mostly on wooden sleepers.

Ballast.—The ballast consists of sandy earth just sufficient to pack the line for running.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient is 1 in 300, except at bridge approaches where the gradients are 1 in 100.

Contract—

Dated the 14th April 1916, *between the Secretary of State for India and the Sara-Sirajganj Railway Company*, as to the construction, maintenance and working of the Sara-Sirajganj railway by the agency of the Eastern Bengal railway.

Main provisions of contract—

(i) *Land.*—Land in British territory provided by Government free of cost.

(ii) *Government-aid.*—For the more convenient and economical construction of the railway, its execution was undertaken by the Government, who also stock, manage, maintain and work it through the agency of the Eastern Bengal railway. The Government agree to allow to the Company in respect of each year, by way of rebate, such a sum, not exceeding in any year the net earnings from traffic (except stores for maintenance or working) interchanged between the Eastern Bengal railway and the Company's railway, as shall, together with the net earnings of the Company for the said year, make up an amount equal to interest for such year at a rate of 5 per cent. per annum on the share capital of the Company for the time being paid up and shall also allow Rs. 15,000 per annum and such other actual expenses as may be incurred by the Company for or towards office expenses and expenses of management and direction of the Company and also such legal expenses as shall have been approved by the Secretary of State or the Government of India.

(iii) *Terms of working.*—For management, maintenance, working and the use of rolling-stock, the Eastern Bengal railway shall retain, each year, a percentage of the gross earnings of the Sara-Sirajganj railway, which shall bear the same proportion to the gross earnings of the said railway, as the working expenses of the Eastern Bengal railway, including the said railway, bear to the gross earnings of the Eastern Bengal railway, including the said railway, up to a maximum of 50 per cent.

(iv) *Distribution of profits.*—If the net earnings exceed 5 per cent. on the paid up share capital of the Company, the office expenses and expenses of management and direction of the Company, as at (ii) above, shall be a first charge on the surplus profits and the balance of the profits shall be divided equally between the Secretary of State and the Company. If the surplus profits are insufficient to meet the administrative charges in full the balnnce will be paid to the Company by the working

5. EASTERN BENGAL RAILWAY SYSTEM—*contd.*

(b) Sara-Sirajganj railway (5′ 6″ gauge)—*concl'd.*

Main provisions of contract—*concld.*

agency out of the stipulated percentage of the earnings retained by the working agency as working expenses.

(v) *Rates and fares.*—Same as on the Eastern Bengal railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin and the persons in charge thereof.— } None specified.

(vii) *Power of the Government to determine contract.*—The Government may determine the contract, by giving 12 months' 'notice of purchase,' either on the 30th September 1946, or on the 31st day of March in the last year of any subsequent period of ten years, in which case the Government undertake to pay to the Company, within 4 months from the date of the determination of the contract, a sum equal to 25 times the amount of the average yearly net earnings of the Company's line (excluding payments on account of rebate) derived during the three years preceding the time at which the contract is determined, provided that the total amount so payable to the Company does not exceed by more than 20 per cent. the total capital expenditure of the Company or is less than such capital expenditure.

The contract may also be determined by giving to the Company 12 months' " notice of special purchase " in the following cases :—

(*a*) When the Secretary of State considers it desirable that the gauge of the said railway should be altered.

(*b*) When it is desired to convert the said railway into a line of through communication.

(*c*) When the Secretary of State desires to extend the said railway and the Company does not, within six months from date of formal requisition from the Secretary of State, raise such additional capital as is necessary for this purpose.

If the contract be determined by " notice of special purchase," the Government undertakes to pay to the Company 25 times the average net earnings of the Company's line (excluding payments on account of rebate) derived by the Company during the three years preceding the time at which the contract is determined or 115 per cent. of the total capital expenditure of the Company whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract if not determined under (vii).*—None specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from, or share of surplus profits to, the Eastern Bengal Railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1915-16	22·37	76,48,161	..	*	..	..	..	..	..	..
1916-17	52·93	86,79,657	1,31,780	65,890	0·76	+1,00,401	1,66,291	1·92	96	50·00
1917-18	53·12	86,48,504	2,68,182	1,34,091	1·55	+1,97,138	3,31,229	3·83	97	50·00
1918-19	52·99	86,67,009	4,27,812	2,08,350	2·40	+2,24,596	4,32,946	5·00	155	51·30
1919-20	53·04	87,13,040	8,50,567	4,25,284	4·88	+ 11,113	4,36,397	5·00	308	50·00
1920-21	53·04	87,45,058	9,08,704	4,54,352	5·20	..	4,54,352	5·20	329	50·00
1921-22	53·04	87,51,371	8,25,614	4,12,807	4·72	+ 22,852	4,35,659	5·00	299	50·00
1922-23	52·98	87,59,991	9,20,226	4,60,113	5·25	+ 25,715	4,85,828	5·55	334	50·00
1923-24	52·96	88,71,821	10,78,706	5,32,752	6·00	—2,107	5,30,645	5·98	392	†50·61
1924-25	52·96	89,40,302	11,74,091	5,87,046	6·57	—14,019	5,73,027	6·41	426	50·00
1925-26	52·96	89,51,624	11,59,919	5,79,959	6·48	—40,911	5,39,048	6·02	421	50·00
1926-27	52·96	90,51,869	12,52,614	6,26,307	6·92	—40,662	5,85,645	6·47	455	50·00
1927-28	51·06	92,39,563	11,59,808	5,79,904	6·28	—61,514	5,18,390	5·61	437	50·00
1928-29	51·06	93,35,635	11,31,178	5,65,589	6·06	—24,489	5,41,100	5·80	426	50·00
1929-30	49·66	93,40,119	10,26,542	5,13,271	5·50	—14,723	4,98,548	5·34	398	50·00
1930-31	49·66	94,21,463	9,01,546	4,50,773	4·78	+4,527	4,55,300	4·83	349	50·00
1931-32	49·66	75,37,856	7,26,582	3,63,291	3·80	+47,735	4,11,026	4·31	281	50·00
1932-33	49·66	95,84,861	6,86,910	3,43,455	3·58	+83,672	4,27,127	4·45	266	50·00
1933-34	49·66	95,88,714	5,86,101	2,93,050	3·06	+1,83,921	4,76,971	4·97	226	50·00
1934-35	54·42	98,11,836	6,46,962	3,23,481	3·30	+1,98,591	5,22,072	5·32	228	50·00
1935-36	54·22	98,11,238	7,98,435	3,99,217	4·07	+1,15,251	5,14,468	5·24	281	50·00
1936-37	54·22	97,99,816	8,82,248	4,41,124	4·50	+80,938	5,22,062	5·33	312	50·00
1937-38	54·22	98,31,307	8,29,409	4,14,705	4·21	+32,273	4,46,978	4·54	293	50·00
1938-39	53·98	98,58,364	8,67,370	4,33,685	4·40	+88,186	5,21,871	5·29	309	50·00

*Credited to capital.

†The increase is due to direct expenditure on flood damage.

5. EASTERN BENGAL RAILWAY SYSTEM—*contd.*

(*c*) Eastern Bengal railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5	REMARKS. 6
Main line—					*The line between Teesta Junction and Mogalhat was originally opened on the 6th February 1882 on the 2′ 6″ gauge as a part of the Kaunia-Dharlla branch which was constructed by the Government of Bengal out of Provincial revenue.
Manihari to Katihar	15-10-20	0·17			
	4-12-21	0·29			
	1-4-87	13·04			
Junction with the Bengal and North-Western railway at Katihar.	8-3-01	0·69			
Katihar to Rayganj	1-7-89	37·49			
Rayganj to Dinagepore	15-2-88	32·68			
Dinagepore to Chirir Bandar	16-5-84	8·75			
Chirir Bandar to Parbatipur Junction	1-7-83	9·89			
Parbatipur Junction to Shampur	19-5-78	15·77			
Shampur to Rungpore	2-7-78	7·50			
Rungpore to Kaunia	1-6-79	10·20			
Kaunia to Mogalhat (including Teesta Bridge)*	1-4-01	16·14			
Mogalhat to Gitaldaha Junction	2-1-02	1·86			
Gitaldaha to Golakganj	23-9-02	24·53			
Golakganj to Kokrajhar	1-2-06	35·75			
Kokrajhar to Sorbhog	1-3-09	39·73			
Sorbhog to Amingaon (on the right bank of the Brahmaputra).	1-4-09	67·21			
†*Santahar-Kaunia loop—*			321·49		† The Santahar-Bonarpara section of this loop, together with the Bonarpara-Fulchari section of the Singhjani branch, was originally the property of the Brahmaputra-Sultanpur Branch Railway Company. It was acquired by the State and amalgamated with the Eastern Bengal railway on the 1st April 1904.
Santahar to Bogra	1-4-99	23·13			
Bogra to Mohimaganj	5-4-00	21·17			
Mohimaganj to Bonarpara	1-8-00	4·60			
Bonarpara to Kaunia	1-7-05	44·77			
Dacca section—			94·07		
Narayanganj to Dacca	4-1-85	9·31			
Dacca to Jaydebpur	1-8-85	20·10			
Jaydebpur to Gafargaon	1-8-85	32·50			
Gafargaon to Mymensingh	1-8-85	23·52			
Jainti Branch, British Section‡*—*			85·43		
South bank of Kaljani river to Alipur Duar	18-1-00	0·64			
Alipur Duar to Raja Bhat Khawa	5-4-00	9·97			
Raja Bhat Khawa to Jainti	1-2-01	9·18			
*Kurigram branch****—*			19·79		
Teesta Junction to Kurigram	2-7-28	13·30			‡This line was originally on the 2′ 6″ gauge, but was converted to, and opened on, the 3′ 3⅜″ gauge up to Raja Bhat Khawa from 13th April 1910 and up to Jainti from 1st May 1910.
Branches and extensions on the Main line—	15-11-29	1·48			
Kosi branch—			14·78		
Katihar to Kasba	1-4-87	21·75			
Kasba to Forbesganj	1-7-89	36·84			
Forbesganj to Jogbani	15-2-09	8·73			
Godagari extension—			67·32		
Katihar to Godagari	1-1-09	105·34			
	5-11-34	3·98			
Kissengunge branch—			109·32		
Barsoi to Kissengunge	15-12-92	35·11			
Murliganj branch—			35·11		
Purnea to Murliganj	20-3-29	34·85			
Bihariganj branch—			34·85		
Banmankhi to Behariganj	1-8-29	17·13			
Dinajpur-Ruhea branch—			17·13		
Dinajpur (Kanchan Jn.) to Pirganj	25-2-28	24·05			
Pirganj to Ruhea	8-5-28	23·75			
Dhubri branch—			47·80		
Golakganj to Dhubri	23-9-02	13·73			
Tangla extension—			13·73		
Rangiya to Tangla	1-3-12	23·98			
Tangla Balsiri Rangapara Railway—			23·98		
Tangla to Majbat	1-12-32	27·27			
Majbat to Rangapara North	7-2-33	25·23			
Branch on the Santahar-Kaunia loop—			52·50		§This line was the property of the Indian General Navigation and Railway Company. It was purchased by the State and incorporated with the Eastern Bengal railway with effect from the 1st January 1920.
Fulchhari branch—					
Bonarpara to Fulchhari (on the right bank of the Brahmaputra).	1-9-00	8·25			
	18-8-12	1·00			
Branch on the Dacca section—			9·25		
§ *agannathganj branch—*					
Mymensingh to Singhjani	15-10-98	33·35			
Singhjani to Jagannathganj	22-10-99	16·12			
Singhjani branch—			49·47		
Bahadurabad (on the left bank of the Brahmaputra) to Singhjani.	18-8-12	24·74			
Branch on the Jainti branch—			24·74		
Dalsingpara branch—					
Raja Bhat Khawa to Kalchini	1-4-12	7·34			
Kalchini to Hasmara	1-4-13	6·66			
Hasmara to Dalsingpara	5-1-14	3·52			
			17·52		
TOTAL OPEN MILEAGE	..	..	..	1,038·28	**This line was originally on the 2′ 6″ gauge but was converted into 3′3⅜″ gauge and opened on 2nd July 1928.
DOUBLE LINE—					
Tees Junction to Lalmonirhat	1-9-14	7·29	7·29	7·29	

5. EASTERN BENGAL RAILWAY SYSTEM—*contd.*

(c) Eastern Bengal railway (3′ 3⅜″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 50-lbs. N. S., and B. S., and 60 lbs. B. S. and B. S. R., flat-footed steel rails and wooden sleepers with the following exceptions :—

(*a*) 24·20 miles of Dacca Section are laid with second-hand 62 lbs. flat-footed, 4·5 miles with second hand 75 lbs. B. S. F. F., 9·00 miles with 80 lbs. F. F. 36·53 miles with second hand 75lbs N. S. F. F. rails on wooden sleepers.

(*b*) 15·25 miles of Teesta Kurigram Branch are laid with second-hand 50 lbs. N. S. flat-footed steel rails on wooden sleepers.

(*c*) 57·00 miles of Golakganj Amingaon section is laid with 80 lbs. F. F. rails.

Ballast.—The whole of the line, except the Rangiya Tangla, Raja Bhat Khawa, Dalsingpara Dinagepur-Ruhea Teesta Kurigram Branches and the Purnea Murliganj railway including Beharigunge Branch is ballasted with brick, stone or shingle ballast.

Fencing.—The whole of the 3′ 3⅜″ gauge is unfenced, except between Parbatipur and Katihar, Katihar and Forbesganj, Kaunia and Golakganj, Santahar and Kaunia, Nalbari and Chutiapara and Dolaiganj and Tejgaon.

On the unfenced sections the station yards are generally fenced.

Curves.—The sharpest curve is of 500 feet radius.

Gradients.—The ruling gradient on the 3′ 3⅜″ gauge section is 1 in 200 which occurs at the approaches of large bridges and fairly frequent. On the Jainti branch, British section and on the section from Raja Bhat Khawa to Kalchini the ruling gradients on the last few miles near the hills are 1 in 100, and 1 in 150, respectively, but there is a small length of 1 in 50 between Buxa Road and Jainti. On the Jagannathganj branch the ruling gradient is 1 in 300. On the main line of the Dacca section there are also 1 in 150 and 1 in 170 at the approaches of the bridges. The ruling gradient on the Teesta Kurigram branch is 1 in 200.

Contracts—

Nil.—The line is owned and worked by the State.

Statistics of working—

Included with the Eastern Bengal Railway (5′ 6″ gauge).

(d) Cooch Behar State railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks
1	2	3	4	5
Gitaldaha to Manshahi River	15-9-93	18·31		This line was originally on the 2′ 6″ gauge, but was converted to, and opened on, the 3′ 3⅜″ gauge up to Cooch Behar from 14th February 1910 and up to the end of the Cooch Behar State section from 13th April 1910.
Manshahi River to the town of Cooch Behar	15-12-98	3·22		
Torsa Bridge	16-5-00	0·11		
Cooch Behar to temporary Alipur Duar (Kholta)	15-4-99	10·96		
Temporary Alipur Duar (Kholta) to the South Bank of the Kaljani river.	18-1-00	0·49		
Total	..	..	33·09	

Details of construction—

Permanent-way.—The permanent-way consists of second-hand 50-lb. flat-footed steel rails, laid on wooden sleepers.

Ballast.—The line is ballasted with shingle.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,432 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

Dated the 25th February 1907, having effect from the 1st January 1907, *between the Secretary of State and His Highness the Maharaja of Cooch Behar*, as to the management, maintenance and working of the Cooch Behar State railway by the Eastern Bengal railway.

Main provisions of agreement—

(i) *Land.*— } The railway is the property of the Cooch Behar Durbar, which provides all
(ii) *Government aid.*— } funds not contemplated in clause 2 of the agreement required for the completion and equipment of the line from time to time, and is managed, maintained and worked by the agency of the Eastern Bengal railway.

(iii) *Terms of working.*— } For management, maintenance and working, the Eastern Bengal railway
(iv) *Distribution of profits.*— } retains 40 per cent. of the gross earnings : provided that when the stock of the Eastern Bengal railway is used for the conveyance of any traffic on the Cooch Behar

5. EASTERN BENGAL RAILWAY SYSTEM—*contd.*

(*d*) Cooch Behar State railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreement—*concld.*

State railway, the Eastern Bengal railway retains up to, but not exceeding, 45 per cent. of the gross earnings obtained from the use of such stock. The remainder, being the net earnings of the Branch, is paid over to the Durbar.

(v) *Rates and fares.*—The Administration of the Eastern Bengal railway has full control over the rates and fares on the Cooch Behar State railway, subject to the maxima and minima prescribed by the Government of India in schedule A appended to the agreement (certain station to station rates applicable after the opening of the Dharlla bridge are prescribed in schedule B to the agreement).

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores. Mails are conveyed in accordance with rules in force on State railways. There is no special provision in the agreement for the carriage of troops, high Government officials and Government stores.

(*b*) Government bullion and coin, and the persons in charge thereof.—Not specified.

(vii) *Power of the Government to determine agreement.—*
(viii) *Power of the Cooch Behar Durbar to determine agreement.—* } Terminable on the expiry of six months' notice from either side.

(ix) *Term of agreement.*—Until determined under (vii) and (viii).

Statistics of working (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14):—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9
	Miles.	Rs.	Rs.	Rs		Rs		
1913-14 .	33·09	20,22,791	3,00,374	1,63,808	8·05	175	45·46	
1914-15 .	33·09	20,50,061	2,69,264	1,41,749	6·91	156	47·36	
1915-16 .	33·09	19,59,396	2,63,494	1,40,785	7·18	153	46·57	
1916-17 .	33·09	19,61,895	2,86,152	1,55,257	7·91	166	45·74	
1917-18 .	33·09	19,76,641	2,69,878	9,39,817	7·07	157	48·19	
1918-19 .	33·09	19,75,838	3,20,525	1,72,030	8·71	186	46·33	
1919-20 .	33·09	19,76,686	3,80,187	2,06,041	10·42	221	45·80	
1920-21 .	33·09	19,83,561	3,19,424	1,72,622	8·70	186	45·96	
1921-22 .	33·09	20,28,744	3,06,142	1,65,316	8·15	178	46·00	
1922-23 .	33·09	20,62,167	3,61,947	1,94,582	9·44	210	46·24	
1923-24 .	33·09	20,58,974	3,66,512	1,97,093	9·57	213	46·22	
1924-25 .	33·09	20,83,773	4,29,833	2,31,919	11·13	250	46·04	
1925-26 .	33·09	21,03,805	4,63,076	2,50,203	11·89	269	45·97	
1926-27	33·09	21,22,003	4,87,496	2,63,634	12·42	283	45·93	
1927-28 .	33·09	21,46,932	5,20,456	2,81,028	13·09	302	46·00	
1928-29 .	33·09	21,68,089	5,63,677	3,05,103	14·07	328	45·87	
1929-30 .	33·09	21,73,765	4,77,986	2,58,055	11·87	278	46·01	
1930-31 .	33·09	21,75,452	3,76,828	2,02,418	9·30	219	46·28	
1931-32 .	33·09	21,75,007	3,08,074	1,64,604	7·56	179	46·57	
1932-33 .	33·09	21,75,007	3,50,336	1,92,685	8·86	204	45·00	
1933-34 .	33·09	21,75,007	3,49,419	1,87,344	8·61	202	45·00	
1934-35 .	33·09	21,75,007	3,52,833	(*a*)1,89,221	8·70	204	45·00	
1935-36 .	33·09	21,74,092	3,82,641	(*a*)2,05,615	9·46	221	45·00	
1936-37 .	33·09	21,74,131	3,88,736	(*a*)2,08,968	9·61	225	45·00	
1937-38 .	33·09	21,76,680	4,21,837	(*a*)2,27,173	10·43	244	46·14	
1938-39 .	33·09	21,83,412	4,11,723	(*a*)2,21,611	10·15	239	46·17	

(*a*) This excludes Rs. 4,837 on account of cost of Law and Order (Police) payable to the Civil Department.

(*e*) Eastern Bengal railway (2′ 6″ gauge)—

The Santipur-Krishnagar branch originally the Ranaghat-Krishnagar branch has been amalgamated with the Eastern Bengal railway system from 1st July 1904. This branch has been extended to Nabadwipghat and opened to traffic on the 30th June 1926.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Santipur-Krishnagar and Krishnagar-Nabadwipghat branch—			
Santipur to Krishnagar	5-4-99	9·50	
Krishnagar to Nabadwipghat	30-6-26	7·64	
Total .	..	..	17·14

5. EASTERN BENGAL RAILWAY SYSTEM—*contd.*

(e) Eastern Bengal railway (2′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The rails are flat-footed steel, second-hand 41¼ lb. per yard and sleepers are laid on sâl.

Ballast.—The line is ballasted with bricks.

Fencing.—No lines on the 2′ 6″ gauge are fenced.

Curves.—The sharpest curve is of 382 feet radius.

Gradients.—The ruling gradient on the Santipur-Krishnagar section is 1 in 500, and on the Krishnagar-Nabadwipghat is 1 in 100.

Contracts—

Nil.—The line is owned and worked by the State.

Statistics of working—

Included with the Eastern Bengal railway (5′ 6″ gauge).

(f) Khulna-Bagerhat railway (2′ 6″ gauge)—

Managing Agents.—Messrs. Ambalal, Himatlal & Co., Ahmedabad.

Date of registration of the Company.—1916.

The construction of this line by the Eastern Bengal railway on behalf of a Branch Line Company was sanctioned in Railway Board's Notification No. 448-P., dated the 9th March 1916. The line commences at Rupsa East on the left bank of the Rupsa river and runs in a south-easterly direction parallel to the Bhyrub river to Bagerhat.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Rupsa East to Bagerhat	10-6-18	19·75	19·75

Details of construction—

Permanent-way.—The permanent-way consists of second-hand flat-footed steel rails, 41¼ lbs. per yard laid on sâl sleepers.

Ballast.—The line is ballasted with bricks and sand.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 1,000.

Contract—

Dated the 19th May 1921, *between the Secretary of State for India and the Khulna-Bagerhat railway Company*, as to the construction, maintenance and working of the Khulna-Bagerhat railway, by the agency of the Eastern Bengal railway.

Main provisions of contract—

(i) *Land.*—Land in British territory provided by Government free of cost.

(ii) *Government aid.*—For the more convenient and economical construction of the railway, its execution was undertaken by the Government, who also manage, maintain and work the line and its rolling-stock through the agency of the Eastern Bengal railway. The Government agree to allow to the Company, in respect of each year, by way of rebate, such a sum not exceeding in any year the net earnings from traffic, except stores for maintenance or working, interchanged between the Eastern Bengal railway and the Company's railway as shall, together with the net receipts of the Company for the said year, make up an amount equal to interest for such year at a rate of 5 per cent. per annum on the share capital of the Company for the time being paid up and shall also allow Rs. 3,500 and such other actual expenses as may be incurred by the Company for or towards office expenses and expenses of management and direction of the Company and also such legal expenses as shall have been approved by the Secretary of State.

(iii) *Terms of working.*—The line with its rolling-stock is maintained, managed and worked for 45 per cent. of gross earnings.

(iv) *Distribution of profits.*—If the net earnings exceed 5 per cent. on the paid up share capital of the Company, the office expenses and expenses of management and direction of the Company as at (ii) above shall be a first charge on the surplus profits and the balance of the profit shall be divided equally between the Secretary of State and the Company. If the surplus profits are insufficient to meet the administrative charges in full the balance will be paid to the Company by the working agency out of the stipulated percentage of the earnings retained by the working agency as working expenses.

5. EASTERN BENGAL RAILWAY SYSTEM—*concld.*

(*f*) Khulna-Bagerhat railway (2′ 6″ gauge)—*concld.*

Main provisions of contract—*concld.*

(v) *Rates and fares.*—The rates and fares for the carriage of goods and coaching traffic over the railway shall be such as may from time to time be sanctioned by the Secretary of State and the classification of goods thereon shall be in conformity with that from time to time in force on the Eastern Bengal railway.

(vi) *Special obligations as to the conveyance of* —

(*a*) Mails, troops, police, high Government officials and Government stores— } All matters and things in connection with the working,

(*b*) Government bullion and coin and persons in charge thereof— } management and maintenance of the railway and conduct of traffic thereon including police, telegraphs and telegraphic appliances and telephones shall in all respects as far as practicable be carried on in the same manner and subject to the same regulations and control by the Secretary of State as the same are carried on the Eastern Bengal railway, and the Company shall not interfere or be concerned therewith.

(vii) *Power of the Government to determine contract.*—The Government may determine the contract by giving 12 months' 'notice of purchase' either on the 31st March 1948 or at the expiry of any subsequent period of 10 years, in which case the Government undertake to pay to the Company a sum equal to 25 times the amount of the average yearly net earnings of the Company's line (excluding payments on account of rebate) derived during the 3 preceding years, provided that the total amount so payable does not exceed by more than 20 per cent. of the total capital expenditure of the Company or is less than such capital expenditure.

The contract may also be determined by giving to the Company 12 months' 'notice of special purchase' in the following cases :—

(*a*) when the Secretary of State considers it desirable that the gauge of the railway should be altered ;

(*b*) when it is desired to convert the railway into a line of through communication ;

(*c*) when the Secretary of State desires to extend the railway and the Company does not raise within 6 months additional capital necessary for the construction of the extension.

If the contract be determined by " notice of special purchase " the Government undertake to pay to the Company 25 times the average net earnings of the line (excluding payments on account of rebate) during the 3 years preceding or 115 per cent. of the total capital expenditure of the Company whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vii)].—None specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from (+), or share of surplus profits payable to (—), the Eastern Bengal railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1918-19	19·75	7,95,986	33,622	18,492	2·32	+1,102	19,594	2·46	40	45·00
1919-20	19·75	7,81,641	76,173	41,896	5·36	..	41,896	5·36	74	45·00
1920-21	19·75	8,09,017	82,339	45,286	5·60	..	45,286	5·60	80	45·00
1921-22	19·75	8,21,948	84,176	46,297	5·36	..	46,297	5·63	82	45·00
1922-23	19·75	8,30,602	87,334	48,034	5·78	..	48,034	5·78	85	45·00
1923-24	19·75	8,30,602	1,03,670	57,019	6·86	—1,132	55,887	6·73	101	45·00
1924-25	19·75	8,32,061	1,08.049	59,427	7·14	—3,549	55,878	6·72	105	45·00
1925-26	19·75	8,53,041	1,16.707	64,189	7·52	—7,704	56,485	6·62	114	45·00
1926-27	19·75	8,60,685	1,27,828	70,305	8·17	—8,614	61,691	7·17	124	45·00
1927-28	19·75	8,55,804	1,26,426	69,534	8·12	—11,562	57,972	6·77	123	45·00
1928-29	19·75	8,59,416	1,23,353	67,844	7·89	—10,444	57,400	6·68	120	45·00
1929-30	19·75	8,64,487	1,24,456	68,451	7·92	—9,161	59,290	6·86	121	45·00
1930-31	19·75	8,73,841	1,19,703	65,837	7·53	—9,124	56,713	6·49	117	45·00
1931-32	19·75	8,79,691	1,11,806	61,493	6·99	—8,452	53,041	6·03	109	45·00
1932-33	19·75	8,78,890	84,993	46,746	5·32	—6,670	40,076	4·56	83	45·00
1933-34	19·75	8,91,279	82,215	45,218	5·07	+2,451	47,669	5·35	80	45·00
1934-35	19·75	8,93,072	83,148	45,732	5·12	..	45,732	5·12	80	45·00
1935-36	19·75	9,01,935	82,482	45,365	5·03	..	45,365	5·03	80	45·00
1936-37	19·75	8,95,015	86,577	47,617	5.32	..	47,617	5·32	84	45·00
1937-38	19·75	9,02,070	89,130	49,022	5·43	..	49,022	5·43	87	45·00
1938-39	19·75	9,04,138	85,386	46,962	5·19	..	46,962	5·19	83	45·00

E. I. RAILWAY SYSTEM.

REFERENCES.

E. I. Railway ---------- MIXED GAUGE. 5'-6" 3'-3 3/8"

Private Companies' lines ----------

Home, Branch and Local line Junctions ----------

Junctions connecting Foreign lines ----------

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.

N

DEHRA DUN
RIKHIKESH
RAIWALA
HARDWAR
SAHARANPUR
KOTDWARA
LHAKSAR
NAJIBABAD
MUAZZAMPUR NARAIN
GAJROULA
MEERUT CITY
MORADABAD
HAPUR
RAJA-KA-SAHASPUR
GHAZIABAD
CHANDAUSI
BAREILLY
SAMBHAL-
HATIM SARAI
KHURJA
SHAHJAHANPUR
ROSA
SITAPUR CITY
ALIGARH
SITAPUR
AUHADPUR
HATHRAS
FARUKHABAD
BAHRAMGHAT
BURHWAL
HATHRAS KILAH
DALIGANJ
BARA BANKI
TUNDLA
AJODHYA
MADHOGANJ
BALAMAU
FYZABAD
JUMNA BRIDGE (AGRA)
AISHBAGH
LUCKNOW
TANDA
SULTANPUR
SHIKOHABAD
CAWNPORE
(ANWARGANJ)
AKBARPUR
RAE BARELI
SHAHGANJ
DARYAPUR
JAUNPUR
JUHI
UNAO
CHILBILA
ZAFARABAD
CAWNPORE
DALMAU
TARI GT.
BENARES
CANT.
UNCHAHAR
ARRAH
PARTABGARH
JANGHAI
DILDARNAGAR
PHAPHAMAU
SASARAM
ALLAHABAD
NAINI
MOGHAL SARAI
DEHRI ON SONE
SONE EAST BANK
DIGHA GHAT
PATNA GHAT
PATNA
FUTWAH
BUKHTIARPUR
MOKAMEH
MOKAMEH GHAT
MONGHYR
JAMALPUR
SULTANGUNGE GHAT
SULTANGUNGE
BHAGALPUR
SAKRIGALI GHAT
SAKRIGALI
RAJMEHAL
TINPAHAR
BARHARWA
LUCKEESARAI
KIUL
MANDAR-
HILL
BAIDYANATHDHAM
JASIDIH
NALHATI
AZIMGANJ
GAYA
MANPUR
MADHUPUR
PALASTHALI
SAINTHIA
GOMOH
CHANDRAPURA
GIRIDIH
AHMADPUR
KASTAGRAM
HESIA
KATWA
BARKAKANA
TETULMARI
BURDWAN
PATHARDHI
BANDEL
PRADHANKHANTA
NAIHATI
GAURANGDI
IKRAH
SHEORAPHULI
CHANCH
ONDAL
KUMHARDUBHI
KHANA
DUM-DUM
SITARAMPUR
SAKTIGARH
ASANSOL
TARAKESWAR
KAMARKUNDU
HOWRAH

6. EAST INDIAN RAILWAY SYSTEM.

Lines comprised in the system.—The East Indian railway system is made up of—

—	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) East Indian railway (5′ 6″ gauge)	*4,217·26	..	*4,217·26
(*b*) Hardwar-Dehra railway (5′ 6″ gauge)	32·04	..	32·04
(*c*) South Bihar railway (5′ 6″ gauge)	75·82	..	75·82
(*d*) Cawnpore-Burhwal link (3′ 3⅜″ gauge)	*80·34	..	*80·34
(*e*) Benares-City Branch (3′ 3⅜″ gauge)	2.18	..	2·18
Total	4,407·64	..	4,407·64

Running powers—

Home line over Foreign lines :—	Miles.
Agra fort to Idgah, Bombay, Baroda and Central India Railway, for passenger trains only	1·63
Agra East Bank to Agra Fort, Bombay, Baroda and Central India Railway for Passenger trains only	1·41
Agra East Bank to Rupbas, Bombay, Baroda and Central India Railway for ballast trains only	†32·55
Naihati to Majherat (East Dock Junct on *via* Kakurgachi Road Junction, Eastern Bengal Railway), for passenger and goods trains	30·23
Naihati to Sealdah, Eastern Bengal Railway, for passenger and goods trains	23·34
Dum-Dum to Chitpur, Eastern Bengal Railway, for goods trains only	2·59
Jumna Bridge to Agra Cantt. *via* Agra City, Great Indian Peninsula Railway, for Passenger and Goods Trains	4·25
Agra Cantt. to Idgah, Great Indian Peninsula Railway, for goods and passenger trains	0·98
Naini to Sankargarh, Great Indian Peninsula Railway, for ballast trains only	24·00
Ghaziabad to Delhi, North Western Railway, for Passenger train only	12·38
Hindan Cabin to Saharanpur, *via* Khanalampura, North Western Railway, for goods trains only	4·42
Hindan Cabin to Saharanpur, North Western Railway , for passenger trains only	3·85
Meerut City to Meerut Cantt., North Western Railway, for passenger trains only	2·69
Jamuniatand to Chandrapura, Bengal Nagpur Railway, for passenger trains only	4·15
Total	148·47

Foreign lines over Home line :—		Miles.
Great Indian Peninsula railway, Naini Junction to Allahabad, for passenger trains		5·27
**Great Indian Peninsula railway, Cawnpore Central to Lucknow, for passenger trains only		45·00
Bengal and North-Western railway, Cawnpore to Aishbagh, 45·03 miles, and Daliganj to Burhwal, 35·31 miles (Cawnpore-Burhwal link, 3′ 3⅜″ gauge).	for passenger and goods trains.	80·34
Rohilkund and Kumaon railway, over Ramganga bridge between Bareilly and Basharatganj		0·53
Rohilkund and Kumaon railway, over Ramganga bridge between Dalpatpur and Moradabad for passenger trains		0·46
Eastern Bengal Railway, Naihati to Bakudih	For Departmental stone trains only.	170·00
Eastern Bengal Railway , Azimganj to Bakudih		62·00
Eastern Bengal Railway, Azimganj to Rajgan *via* Bandel Barharwa Loop		85·00
Eastern Bengal Railway, Azimganj to Pakur *via* Bandel Barharwa Loop		77·00
Bombay, Baroda and Central India Railway, Anwar Gunj to Cawnpore Central, for passenger trains only		1·37
Bengal Nagpur Railway, Barkakana-Chandrapura, for goods trains only		51·99
Total		578·96

(*a*) East Indian railway (5′ 6″ gauge)—

The property owned by the old guaranteed East Indian Railway Company, which was purchased by the State in 1879, was worked by a reconstituted company to the end of 1924 when all the contracts then subsisting between the Secretary of State and the Company were determined and the line was brought under direct State management with effect from the 1st January 1925.

The Oudh and Rohilkhand railway was acquired by the State from the late Guaranteed Company on the 1st January 1889 and this railway was amalgamated with the East Indian railway with effect from the 1st July 1925.

A tramway constructed at the expense of Messrs. Carew and Company connects the Rosa Sugar factory with Rosa station on the Oudh and Rohilkhand section of the East Indian railway. This tramway is 3·25 miles long and is worked by cattle power. It is used for goods traffic only.

* The mixed gauge between Burhwal and Bara Banki (16·79 miles) is included both in the broad gauge and the metre gauge.
†Includes mileage of Agra Cantonment to Rupbas, Bombay, Baroda and Central India Railway, for ballast trains only.
**The Great Indian Peninsula Railway ceased to exercise running powers over the Cawnpore-Lucknow Section on and from 23rd April 1938.

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

(*a*) East Indian railway (5′ 6″ gauge)—*contd.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Howrah to Hooghly	15-8-54	23·28			
Hooghly to Pundooah	1-9-54	14·31			
Pundooah to Khana Junction	3-2-55	36·85			
Khana Junction to Raneegunge	3-2-55	45·71			
Raneegunge to Siarsol (near Asansol)	21-7-63	1·70			
Siarsol (near Asansol) to Sitarampur	1-1-65	15·15			
Sitarampur to Luckeeserai Junction	1-1-71	124·59			
Luckeeserai to Dinapore	17-11-62	82·42			
Dinapore to Moghal Sarai	22-12-62	125·92			
Moghal Sarai to Mirzapur	1-1-64	39·28			
Mirzapur to South Bank, Jumna	4-4-64	52·95			
Jumna Bridge to Allahabad	15-8-65	2·75			
Allahabad to Cawnpore	3-3-59	119·47			
Cawnpore to Etawah	1-7-61	86·46			
Etawah to Shikohabad	13-11-61	34·39			
Shikohabad to Tundla Junction	1-4-62	22·92			
Tundla Junction to Aligarh	1-3-63	48·56			
Aligarh to Chola (Bulandshahr Road)	1-4-64	35·54			
Chola to Ghaziabad	1-8-64	29·14			
			941·39		
Loop line—					
Khana Junction to River Adjai	3-10-58	20·87			
River Adjai to Sainthia	3-9-59	24·11			
Sainthia to Tinpahar	15-10-60	76·14			
Tinpahar to Bhagalpur	1-11-61	69·53			
Bhagalpur to Jamalpur	10-2-62	34·48			
Jamalpur to Kiul	7-11-62	28·00			
			253·13		
Grand Chord—					
Sitarampur to Barakar	1-1-65	5·43			
Barakar to Dhanbad	20-5-94	25·75			
Dhanbad to Paharpur	6-12-06	103·69			
Paharpur to Manpur	15-8-06	17·42			
Manpur to Gaya	1899	3·45			
Gaya to Moghal Sarai	1-3-00	118·95			
			274·69		
Howrah-Burdwan Chord—					
A point 6 miles from Howrah to Saktighar	1-1-17	45·26			
			45·26		
Branches on the Main line—					
*Tarkessur branch—**					*This line was constructed by the Tarkessur Railway Company and worked by the East Indian Railway Company, under an agreement, up to the 31st December 1914. It was acquired by the State and incorporated with the East Indian railway on the 1st January 1915.
Sheoraphuli to Tarkessur	1-1-85	22·23			
			22·23		
Naihati branch—					
Bandel Junction to Naihati	15-3-87	4·47			
			4·47		
Bandel-Barharwa branch—					
Bandel Junction to Nabadwip	1-4-12	40·47			
Nabadwip to Katwa	15-5-12	24·44			
Katwa to Jangipur Road	1-5-13	66·80			
Jangipur Road to Dhulian Ganges	31-1-13	17·36			
Dhulian Ganges to Barharwa	19-1-11	16·74			
			165·81		
Sakrigalighat branch	15-10-20	1·20			
			1·20		
Ondal-Sainthia Chord—					
Ondal to Sainthia	10-12-06	43·82			
			43·82		
Bhadreswar Ghat branch—					
Bhadreswar to River Bank	6-12-92	2·60			
			2·60		
Kasta coal-fields branch—					
Mile 130·42 on the Ondal Sainthia Chord to Palasthalai.	15-5-22	17·01			
			17·01		
Ondal loop—					
Ondal to Baboisole	1-5-64	2·03			
Baboisole to Mangalpur	1-1-63	2·74			
Mangalpur to Toposi	2-2-63	2·65			
Toposi to Ikrah Junction	15-4-94	2·42			
Ikrah Junction to Gaurangdi	1-6-95	14·20			
Buktarnagar-Ondal connection	16-11-20	0·91			
			24·95		
Toposi Barabani Chord—					
Toposi to mile 3·79	15-6-08	3·79			
Mile 3·79 to mile 6·50	19-4-15	2·71			
Mile 6·50 to Barabani	1-4-25	4·62			
			11·12		
Ikrah branch—					
Ikrah Junction to Barabani	15-4-94	8·40			
Barabani to Sitarampur	15-4-02	6·98			
			15·38		
Carried over	..	..	..	1,823·06	

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

(*a*) East Indian railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway	Date of opening.	Miles.	Total	Grand total.	Remarks
1	2	3	4	5	6
Brought forward . .	..	..	..	1,823·06	
Salanpur branch—					
Salanpur to Shamdi	7-9-94	4·29			
	1-1-97	1·24			
			5·53		
Giridih branch—					
Madhupur Junction to Giridih . . .	1-1-71	26·70			
			26·70		
*Deoghur branch**—					
Jasidih Junction to Baidyanathdham . .	23-12-82	4·12			
			4·12		
Mokameh Ghat branch—					
Tal Junction, *via* Mokameh Ghat to Mokameh Junction.	1-5-83	3·70			
			3·70		
Hathdah Ghat branch—	26-11-25	0·22			
Hathdah Junction to Hathdah Ghat .	1-11-26	0·85			
			1·07		
Patna Ghat branch—					
Patna to Patna Ghat	17-11-62	0·87			
			0·87		
Patna-Gaya branch†—					
Patna Junction to Patna . .	2-6-79	0·25			
Patna Junction to Jehanabad . .	21-4-79	28·95			
Jehanabad to Gaya	2-6-79	28·48			
			57·68		
Digha Ghat branch—					
Patna Junction to Digha Ghat . .	2-4-85	5·53			
Digha Ghat Fair Weather Ghat line. .	7-11-23	1·13			
			6·66		
Tari Ghat branch‡ —					
Dildarnagar Junction to Tari Ghat . .	5-10-80	12·00			
			12·00		
Allahabad Fort branch	3-3-59	2·14			
			2·14		
Realignment of track near Chaudari Cabin and providing transition to curves.	15-10-38	0·08	0·08		
Cawnpore city branch	15-2-79	0·88			
			0·88		
Shikohabad-Farukhabad branch—					
Shikohabad to Mainpuri	1-3-05	29·71			
Mainpuri to Bhongaon	17-8-05	8·63			
Bhongaon to Farukhabad . . .	1-1-06	27·47			
			65·81		
Agra branch—					
Tundla Junction to Jumna bridge . .	1-4-62	12·52			
Jumna bridge to Agra city (Agra direct access).	1-1-08	0·96			
			13·48		
Hathras branch—					
Hathras Junction to Hathras Kilah . .	1-11-98	5·92			
			5·92		
Hapur branch—					
Khurja to Bulandshahr	7-2-07	14·00			
Bulandshahr to Hapur	15-4-07	24·86			
			38·86		
Branches on the loop line—					
Azimganj branch§—					
Nalhati to Azimganj . . .	21-12-63	27·23			
			27·23		
Rajmehal branch—					
Tinpahar Junction to Rajmehal . .	15-10-60	7·00			
			7·00		
Bhagalpur-Bausi branch—					
Bhagalpur to Mandar Hill . . .	1-10-26	31·13			
			31·13		
Sultangunge Ghat branch—					
Sultangunge Junction to Sultangunge Ghat	6-5-95	1·16			
			1·16		
Monghyr branch—					
Jamalpur Junction to Monghyr . .	10-4-62	5·68			
			5·68		
Branches on the Grand Chord—					
Chanch branch—					
Chanch block hut to mile 197·30 .	1-2-93	2·88			
	5-8-96	0·97			
			3·85		
Between main line and grand chord at Sitarampur.	3-1-19	1·26	1·26	322·81	
Carried over .	..	..	..	2,145·87	

*This line was constructed on the 3′ 3½″ gauge and worked by Messrs. Burn & Co. of Calcutta up to the 30th June 1911. It was acquired by the State and incorporated with the East Indian railway on the 1st July 1911 and converted to the 5′ 6″ gauge on the 13th September 1913.

†This line was constructed by the State and worked by that agency up to 1882 It was made over to the East Indian Railway Company to be worked, under an agreement, on the 1st January 1883 and incorporated with the East Indian railway on the 1st July 1892.

‡This line is the old Dildarnagar-Ghazipur State railway which was incorporated with the East Indian railway on the 1st January 1889.

§This line was constructed by the Indian Branch (afterwards Oudh and Rohilkhand) Railway Company as a 4′ gauge line. It was purchased by the State on the 31st March 1872, incorporated with the East Indian railway on the 1st April 1892 and opened on the 5′ 6″ gauge on the 15th July 1892.

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

(*a*) East Indian railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward	..	..	..	2,145·87	
Pandra branch—					
Pandra block hut to mile 151·41	26-11-00	2·66	2·66		
Pradhankhunta-Pathardihi Chord—					
Pradhankhunta to Pathardihi	1-1-13	9·59	9·59		
Katras branch—					
Dhanbad to Katrasgarh and beyond	20-5-94	9·11			
	1-11-18	2·35	11·46		
Damuda branch—					
Kusunda to Jharia	30-6-95	3·47			
Jharia to Pathardihi	30-6-95	3·40			
	15-7-96	1·77	8·64		
Jheragurah Goluckdih branch—	20-9-21	3·19			
	31-3-33	0·86	4·05		
Jharia branch—					
Dhanbad to Jharia	1-5-03	3·75	3·75		
Kusunda-Tetulmari link—					
Kusunda to Tetulmari (including portion of Chandur branch).	20-4-07 to 6-12-06	3·15	3·15		
Katras-Khanoodih extension—					
Katrasgarh to Khanoodih	7-3-03	7·17	7·17		
Jamuniatand link—					
Khanoodih extension mile 182·58 to mile 184·55 on the Bokharo Colliery joint line.	11-10-16	1·97	1·97		
Katras Mulkera cross connection—					
Northern half of connection	15-8-03	0·66	0·66		
Katras Grand Chord link	1-11-18	2·65	2·65		
Jhennagurah Branch	31-10-04	2·31	2·31		
Barun-Daltonganj branch—					
Sone East Bank (Barun) to Rajhara	3-5-02	67·30			
Rajhara to Daltonganj	5-12-02	10·72	78·02		
Gomoh-Chandrapura Chord	1-5-27	9·96	9·96		
Chandrapura to Bermo*	1-9-15	11·58			* These sections were constructed by the B. N. Railway and transferred to E. I. Railway on 1-4-28.
Bermo to Danea*	1-8-25	20·75			
Danea to Barkakana*	31-3-26	22·53	54·86		
Barkakana to Barwardih	1-2-29	95·94			
Barwardih to Daltonganj	31-1-29	17·44	113·38		
Main line—					
Moghal Sarai to mile 3·98	22-12-62	3·64			
Mile 3·98, south of the Dufferin bridge, to Kashi (Benares Ganges) station.	1-10-87	4·25			
(Kashi Benares Ganges) station to Benares Cantonment.	18-6-83	1·50			
Benares Cantonment to Rae Bareli	4-4-98	138·78			
Rae Bareli to Lucknow	15-10-93	48·68			
Lucknow to Sandila	1-2-72	30·24			
Sandila to Hardoi	15-7-72	33·00			
Hardoi to Shahjahanpur	1-3-73	39·00			
Shahjahanpur to Pitambarpur	8-9-73	32·00			
Pitambarpur to Bareilly	1-11-74	13·00			
Bareilly to Moradabad (chord line *vii* Rampur).	8 6-94	†56·07			†Of this, 0·49 mile over the Ramganga bridge (Moradabad) is of mixed (5′ 6″ and 3′ 3⅜″) gauge.
Moradabad to Nagina	8-10-84	47·25			
Nagina to Najibabad	1-4-85	13·74			
Najibabad to Saharanpur	1-1-86	56·28	517·43		
Benares-Lucknow loop—					
Benares Cantonment to Shahganj	5-1-74	56·03			
Shahganj to Bilwai	1-5-74	7·00			
Bilwai to Malipur	18-4-74	9·00			
Malipur to Akbarpur	2-3-74	12·00			
Akbarpur to Fyzabad	10-6-73	38·24			
Fyzabad to Bara Banki	25-11-72	61·97			
Bara Banki to Lucknow Block hut	1-4-72	14·43	198·67		
				1,030·38	
Carried over	..		..	3,176·25	

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

(*a*) East Indian railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total	Remarks.
1	2	3	4	5	6
Brought forward . .	..	..	..	3,176·25	
Lucknow-Sultanpur Zafarabad branch—					
Utratia to Hydergarh	31-3-31	27·75			
Hydergarh to Sultanpur	31-3-32	51·58			
Sultanpur to Zafarabad	25-5-32	56·78			
			136·11		
Unao-Madhoganj branch	21-12-30	47·93			
			47·93		
Bareilly-Moradabad loop—					
Bareilly to mile 5	22-12-73	‡5·00			‡Of this, 1·17 miles over Ramganga bridge (Bareilly) are of mixed (5′ 6″ and 3′ 3⅛″) gauge.
Mile 5 to Aonla	1-11-73	11·00			
Aonla to Chandausi	10-6-73	27·00			
Chandausi to Moradabad	28-10-72	27·22			
			70·22		
Branches on the main line—					
Cawnpore branch—					
Lucknow to left bank of Cawnpore Ganges	23-4-67	40·78			
Left bank of the Ganges to junction with the old East Indian railway at Cawnpore.	15-7-75	3·22			
			44·00		
Balamau-Madhoganj branch—					
Balamau to Madhoganj	20-12-03	14·20			
			14·20		
Madhoganj-Auhadpur extension—					
Madhoganj to Bilgram	15-11-09	7·62			
Bilgram to Auhadpur	9-3-10	9·43			
			17·05		
Balamau-Sitapur branch—					
Balamau to Misrikh	9-3-10	22·44			
Misrikh to Sitapur	5-4-10	14·32			
			36·76		
Chandpur Bijnor Muazzampur Narain Branch.	5-1-30	36·60			
			36·60		
Rosa-Sitapur branch—					
Rosa to Sitapur City	18-6-10	49·22			
Sitapur City to Sitapur Cantonment .	2-2-11 6-4-14	2·66 0·77			
			52·65		
Moradabad-Ghaziabad branch—					
Moradabad to Gajroula	1-4-00	33·40			
Gajroula to Ghaziabad	25-11-00	53·37			
			86·77		
Hapur-Meerut branch—					
Hapur to Meerut	7-11-04	17·91			
			17·91		
Kotdwara branch—					
Najibabad Junction to the right bank of the Koh river opposite Kotdwara	24-12-96	15·19			
			15·19		
Hardwar branch—					
Lhaksar Junction to the left bank of the Ganges Canal near Jawalapur .	1-1-86	13·53			
Left bank of the Ganges Canal near Jawalapur to Hardwar	20-8-86	3·53			
			17·06		
Rikhikesh branch—					
Raiwala to Rikhikesh	2-4-27	7·16			
			7·16		
Branches on Benares-Lucknow loop—					
Allahabad-Fyzabad branch—					
Fyzabad to Sultanpur	1-2-04	35·50			
Sultanpur to Siwait*	1-7-03	*47·05			*Excluding 2·45 miles, between Partabgarh and Chilbila, which is a part of the main line.
Siwait to Phaphamau	20-1-04	3·27			
Phaphamau to Allahabad . . .	1-1-05	7·00			
			92·82		
Allahabad-Jaunpur branch—					
Phaphamau to Mariahu . . .	18-6-06	47·51			
Mariahu to Zafarabad	1-1-07	10·67			
			58·18		
Bahramghat branch—					
Bara Banki to Bahramghat . . .	20-11-72	†21·52			†Of this the length from Burhwal to Bara Banki, 16·79 miles, is of mixed (5′ 6″ and 3′ 3⅛″) gauge.
			21·52		
Branches on the Bareilly-Moradabad loop—					
Aligarh branch—					
Chandausi to Rajghat Narora . .	28-10-72	30·48			
Rajghat Narora to Aligarh . . .	1-2-72	30·12			
			60·60		
Allahabad-Rae Bareli-Cawnpore branch—					
Phaphamau to Rae Bareli . . .	2-11-11	67·60			
Daryapur to Dalmau	2-11-11	15·98			
Unchahar to Unao	1-2-12	69·44			
			§153·02	985·75	§The line which was dismantled during the war was relaid and opened on 8-8-27.
Carried over	..	..	..	4,162·00	

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

a) East Indian railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway.	Date of opening.	Miles.	Total	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward .	..	..	..	4,162·00	
Branches on the Bareilley Moradabad loop—concld.					
Gajroula-Chandpur Siau branch—					
Gajroula to Chandpur Siau . . .	7-6-11	21·88	21·88		
Raja-ka-Sahaspur to Sambal Hatim Sarai	25-6-12	14·64	§14·64		§This line which was dismantled during the war was relaid and opened on 8th January 1922.
Akbarpur-Tanda branch—					
Akbarpur to Tanda . . .	28-10-12	10·72	10·72		
Calcutta Chord Railway (sanctioned 23rd July 1925).	†1-2-32	8·00	8·00	55·24	†Opened for goods traffic.
Net excess on remeasurement . .	..	0·02	0·02	0·02	
Total 5′ 6″ gauge . .	..	..	..	4,217·26	
3′ 3⅜″ *Gauge—Benares City branch*—					
Benares Cantonment (Oudh and Rohilkhand) to Benares City (Bengal and North-Western).	1-4-99	‖2·18	2·18	2·18	‖ Included in the statistics of working of the E. I. Rly.
TOTAL OPEN MILEAGE .	..	..	..	4,219·44	
SEVEN TRACK LINE—					
Howrah station to mile 0·89 . . .	1-1-08	0·89	0·89	0·89	
SEXTUPLE LINE—					
Howrah station from mile 0·89 to 0·97 .	1-1-08	0·08	0·08	0·08	
QUINTUPLE LINE—					
Sorting yard cabin to mile 5½ . . .	1-1-17	4·01	4·01	4·01	
QUADRUPLE LINE—					
Serampore to Sheoraphuli . . .	26-6-13	1·57			
Saktighar to Burdwan . . .	1-1-17	8·32			
Burdwan to Khana Junction . . .	23-4-23	7·40			
Borachuck to Sitarampur . . .	11-8-28	3·39			
Raneegunj to Asansol . . .	30-9-30	2·50			
Junction point of South Behar to Gaya .	30-4-14	2·42			
			25·60	25·60	
TRIPLE LINE—					
Bally to Uttarpara . . .	1-10-15	1·04			
Uttarpara to Serampore . . .	3-6-12	5·32			
Sheoraphuli to Baidyabati . . .	18-9-13	1·50			
Baidyabati to Bhadreswar . . .	17-4-16	2·61			
Talit to Khana . . .	1-1-59	0·96			
Ondal to Raneegung . . .	16-11-20	4·21			
Raneegunge to Asansol . . .	22-7-07	8·60			
Asansol to Borachuck . . .	13-3-24	1·42			
„ to Barakar . . .	1-7-27	1·66			
Grand Chord line to Barakar . .	25-4-28	3·22			
			30·54	30·54	
DOUBLE LINE—					
On the main line—					
Bhadreswar to Chandernagore . .	1-2-58	*2·54			*Excluding triple length.
Chandernagore to Hooghly . .	1-5-58	3·05			
Hooghly to Magra . . .	1-10-58	5·48			
Magra to Pundooah . . .	25-2-59	8·80			
Pundooah to Saktighar . . .	1-10-59	*20·37			
Burdwan to Khana . . .	1-1-59	*0·32			
Khana to Durgapur . . .	1-6-70	31·35			
Durgapur to Raneegunge . .	2-9-70	*10·15			
Raneegunge to Sitarampur . .	19-12-70	*0·90			
Sitarampur to Luckeeserai . .	1-1-71	124·59			
Luckeeserai to Burhee . . .	22-6-60	9·82			
Burhee to Barh . . .	22-2-68	27·00			
Barh to Futwah . . .	11-1-68	25·87			
Futwah to Dinapore . . .	20-3-67	19·63			
Dinapore to Bihta . . .	13-8-68	10·84			
Bihta to Arrah . . .	28-3-70	13·64			
Arrah to Buxar . . .	13-8-68	42·63			
Buxar to Dildarnagar . . .	15-4-82	22·47			
Dildarnagar to Zamania . . .	20-5-82	8·42			
Zamania to Sakaldiha . . .	20-9-82	16·17			
Sakaldiha to Moghal Sarai . .	18-8-82	13·27			
Moghal Sarai to Ahraura Road .	10-8-07	7·92			
Ahraura Road to Kylahat . .	8-12-08	4·95			
Kylahat to Chunar . . .	29-12-08	5·22			
Chunar to Dagmagpur . . .	19-2-09	4·91	440·31		
Carried over (DOUBLE LINE) .	..	..	..	440·31	

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

(*a*) East Indian railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward	..	..	440·31		
DOUBLE LINE—*concld.*					
On the main line—concld.					
Dagmagpur to Pahara	27-2-09	4·91			
Pahara to Jhingura	16-1-08	4·61			
Jhingura to Mirzapur	6-8-07	6·76			
Mirzapur to Bindhachal	6-7-11	4·56			
Bindhachal to Birohe	12-7-11	2·91			
Birohe to Gaipura	26-9-11	4·64			
Gaipura to Jigna	10-10-11	4·34			
Jigna to Mandah Road	16-11-11	5·24			
Mandah Road to Unchdih	30-11-11	5·07			
Unchdih to Meja Road	23-11-11	5·19			
Meja Road to Tonse bridge	26-10-11	3·24			
Tonse bridge to Bheerpur	10-4-11	3·58			
Bheerpur to Karchana	9-4-11	5·74			
Karchana to Chheoki	6-8-09	5·70			
Chheoki to Naini	31-1-07	1·08			
Naini to Allahabad	15-1-06	3·76			
	4-10-13	0·60			
Allahabad to Subalangange	27-1-09	4·09			
Tundla to Makhanpur	31-3-32	16·54			
Makhanpur to Sarai Bhopat	11-1-33	35·19			
Sarai Bhopat to Etawah	23-8-35	4·69			
Etawah to Ekdil	20-10-36	5·61			
			578·36		
On the branches of the main line—					
Naihati branch	15-3-87	4·37			
	1-7-04				
			4·37		
On the Grand Chord—					
Sitarampur to Barakar	6-3-01	0·55*			
Barakar to Chanch	15-2-07	1·62			*Excluding the triple length.
Chanch to Mugma	29-9-05	3·78			
Mugma to Futka	29-1-06	3·16			
Futka to Kaloobathan	17-1-06	2·59			
Kaloobathan to Chhota Ambona	21-3-06	5·79			
Chhota Ambona to Pradhankhunta	17-10-05	3·68			
Pradhankhunta to Dhanbad	20-8-06	5·01			
	1-7-06				
Dhanbad to Tetulmari	10-8-22	5·24			
Tetulmari to Nichitpur	7-8-22	3·09			
Nichitpur to Matari	28-9-18	3·80			
Matari to Gomoh	22-9-18	5·98			
Gomoh to Hazaribagh Road	26-2-23†	26·75			†The date of opening through
Hazaribagh Road to Parasabad	29-4-24	12·84			
Parasabad to Sarmatand	2-5-24	5·75			
Sarmatand to Gajhandi	30-11-22†	16·76			
Gajhandi to Gurpa	11-3-07	13·62			
Gurpa to Tankuppa	17-12-23	15·01			
Tankuppa to Bandhua	4-1-24	4·77			
Bandhua to Phalgu Bridge West	8-4-25	8·84			
Phalgu Bridge West to Gya North Cabin	30-1-25	1·04			
Gya to Kastha	30-4-14	4·93			
Kastha to Rafiganj	6-1-27	16·78			
Rafiganj to Sone East Bank	16-2-27	24·47			
Sone East Bank to Upper Sone Bridge	30-3-27	0·43			
Upper Sone Bridge to Dehri-on-Sone	6-3-25	3·10			
Dehri-on-Sone to Khurmabad	30-3-27	22·71			
Khurmabad to Bhabhoa Road	20-4-27	16·80			
Bhabhoa Road to Karamnasa	4-5-27	10·40			
Karamnasa to Saiyadraja	8-6-28	9·40			
Saiyadraja to Ganj Khwaja	4-5-27	10·01			
Ganj Khwaja to Moghal Sarai	4-5-14	1·52			
			270·22		
On the branch of the Grand Chord—					
Dhanbad to Kusunda	22-4-24	2·28			
Kusunda to Katrasgarh	16-1-24	4·57			
Katrasgarh to Phularitand	28-2-23	4·49			
Portion of Jharia branch	1-1-04	0·17			
	26-9-12	1·45			
Lodna to Pathardihi	1-1-13	0·45			
Between main line and grand chord at Sitarampur.	3-1-19	1·26			
			14·67		
On the Howrah-Burdwan Chord—					
A point 6 miles from Howrah to Saktighar	1-1-17	45·26			
			45·26		
Lucknow Blockhut to Kakori	11-10-09	11·57			
Moghal Sarai to Bechupur	21-4-13	1·24			
Bechupur to right bank of Dufferin Bridge	21-12-12	4·19			
Kashi to Benares Cantonment	5-3-13	2·82	19·82		
Calcutta chord Railway	15-4-33	8·08	8·08		
GRAND TOTAL, DOUBLE LINE	..	..	..	940·78	

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

(*a*) East Indian railway (5′ 6″ gauge)—*contd.*

Details of construction (E. I. Section)—

Permanent-way.—The main line from Howrah to Ghaziabad including all branches is laid with steel rails. A few short branches such as Bhadreswar Ghat, Salanpur and Pandra branches are still partly laid with iron rails but these are being replaced with second-hand steel rails removed from main and branch lines in the course of relaying.

On the main line—Howrah to Allahabad—a distance of about 564 miles—the line is laid with the following rails :—

	Up.	Down.
85 lbs. B. H. steel rails	58½ miles.	88⅞ miles.
88½ lbs. „ „ „	239½ „	186 „
90 lbs. B. S. F. F. rails	3 „	1⅝ „
90 lbs. R. B. S. F. F. rails	98 „	119⅝ „
100 lbs. D. H. rails	18⅜ „	18⅜ „
100 lbs. B. S. F. F. rails	38 „	1¼ „
115 lbs. B. S. F. F. rails	109 „	148⅝ „

Above Allahabad—Main line—Allahabad to Ghaziabad—a distance of about 376 miles the line is laid with the following rails :—

	Up.	Down.
85 lbs. B. H. steel rails	39⅝ miles.	44¼ miles.
88½ lbs. B. H. steel rails	225⅜ „	21⅜ „
90 lbs. R. B. S. F. F. rails	22¼ „	..
100 lbs. D. H. rails	88¼ „	⅜ mile

On the Grand Chord—Sitarampore to Moghalsarai—a distance of about 281 miles—the line is laid with the following rails :—

	Up.	Down.
88½ lbs. B. H. steel rails	..	4⅛ miles.
90 lbs. B. S. F. F. rails	120⅝ miles.	..
90 lbs. R. B. S. F. F. rails	15¼ „	125¾ miles.
100 lbs. D. H. rails	49¼ „	26⅞ „
115 lbs. B. S. F. F. rails	91¾ „	128¾ miles.

On the Howrah-Burdwan Chord the rails laid are 90 lbs. flat-footed British standard for about 40 miles in single track (from mile 5 to 15 and mile 40 to 50), and 115 lbs. B. S. F. F. on the rest.

On Sahibgunge Loop the rails laid are 75 lbs. D. H. steel for about 67 miles, 85 lbs. B. H. rails for about 29 miles, 88½ lbs. B. H. rails for 149 miles and 90 lbs. R. B. S. rails for 5 miles.

The Bandel-Barharwa Branch is laid with 75 lbs. D. H. steel rails for about 136 miles, 73 lbs. D. H. steel rails for 5 miles and 85 lbs. B. H. steel rails for about 25 miles.

The Ondal—Sainthia Chord is laid with 75 lbs. F. F. (E. I. R.) steel rails except 5 miles with 85 lbs. B. H. rails.

The Chara, Giridih, Pathardihi—Pradhankunta link, Mokameh Ghat and Patna-Gaya branches are laid with 85 lbs. B. H. rails.

On Barkakana Loop—from Gomoh to Sone East Bank, a distance of about 255 miles—the rails laid are 90 lbs. F. F. B. S. for about 177¼ miles, 90 lbs. R. B. S. for about 27⅝ miles and 85 lbs. B. H. for 50¾ miles.

The Naihati and Tarakeswar Branches are laid with 88½ lbs. B. H. steel rails and the Agra Branch with 90 lbs. F. F. R. B. S.

The Calcutta Chord Railway is laid with 115 lbs. B. S. F. F. steel rails for 8 miles, with 90 lbs. F. F. R. B. S. steel rails for 5 miles and with 85 lbs. B. H. steel rails for 3 miles.

The following branches are laid with 75 lbs. D. H. steel rails :—

1. Rajmehal Branch.
2. Monghyr Branch.
3. Kasta Branch.
4. Ondal Loop.
5. Barabani Loop.
6. Toposi-Barabani Chord.
7. Deoghar Branch.
8. Dhanbad-Jheriah Chord (3 miles 75 lbs. & 1 mile 85 lbs.).
9. Nichitpur Link.
10. Katras-Jamuniatand Branch (excepting 9 miles with 85 lbs. in single track).
11. Tetulmari Link.
12. Damuda Branch.
13. Pathardihi Branch.
14. Goluckdih Branch (excepting one mile with 85 lbs.).
15. Katras-Khanudih Extension.
16. Jhennagurah Branch.
17. Dighaghat Branch.
18. Tarighat Branch.
19. Shikohabad-Farukhabad Branch.
20. Khurja-Hapur Branch.
21. Hathras Killah Branch.

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

(*a*) East Indian railway (5′ 6″ gauge)—*contd.*

Details of construction (E. I. Section)—*concld.*

Sleepers.—At present laid about 25·86 per cent. of the sleepers are wooden and the remainder mostly iron. The wooden sleepers principally consist of Sâl and Deodar. The Chairs are cast-iron ; the iron sleepers are of Denham Olphert Pattern, Railway Board and E. I. R. pattern and steel trough sleepers. In Agra Branch various types of cast-iron plate sleepers are laid.

Ballast.—The main lines are ballasted throughout with stone.

Fencing.—The line is fenced throughout except on the Damuda, Ikrah, Salanpur, Chanch, Pandra, Azimganj, Barun-Daltonganj, Shikohabad-Farukhabad branches, Katwa-Barharwa section of Bandel-Barharwa branch, Deoghar branch, the Ondal loop, the Ondal-Sainthia and Dhanbad-Jharia chords.

Curves.—The sharpest curve on the E. I. Ry. is of 8° or 700 feet radius and is situated on the Katrasgarh branch between miles 165—169.

Gradients.—The ruling gradient on the main line is 1 in 300, except between Raneegunge and Luckeeserai where it is 1 in 200 with a 1 in 100 banking section, between Simultala and Jhajha, and on the Grand Chord, 1 in 200 (compensated on curves), with a 1 in 80 banking section between Gurpa and Gujhandi. The ruling gradient on the Tarakeswar branch is 1 in 500, on the Howrah-Burdwan chord and the Shikohabad-Farukhabad branch 1 in 400, on the Barkakana loop, *viz.*, from Gomoh to Sone East Bank 1 in 150, on the Patna-Gaya and Digha Ghat branches 1 in 250, on the Bandel-Barharwa branch, the Sahibgunge loop, the Monghyr branch, the Ondal-Sainthia chord and on the Azimganj branch 1 in 100, and on the Deoghur branch 1 in 50 and on the Khurja-Hapur branch 1 in 200.

Details of construction (O. and R. Section).—

Permanent-way.—The main line is laid with 90 lbs. flat-footed steel rails British Standard on wooden and C. I. sleepers. The Fyzabad loop is laid with 75 lbs. flat-footed steel rails for 10 miles on cast-iron pot sleepers, wooden sleepers, and Fowler boxes sleepers and with 90 lbs. flat-footed steel rails British Standard and R. B. S. for 188 miles on wooden, steel and C.I. sleepers. On most of the branches the rails are 75 lbs. flat-footed steel. The Balamau-Auhadpur branch is laid partly with 75 lbs. flat-footed steel rails, and partly with 60 lbs. steel rails, and the Bahramghat branch with 75 lbs. flat-footed steel rails on wooden sleepers.

The Allahabad-Rae Bareli branch is laid with 75 lbs. I. S. R. F. F. and Cawnpore branch with 90 lbs. flat-footed steel rails, British Standard, on wooden and C. I. sleepers.

The Lucknow-Sultanpur-Zafarabad branch is laid with 85 lbs. B. H. steel rails on wooden sleepers except 13 miles with 75 lbs. F. F. steel rails on wooden sleepers.

The Moradabad-Delhi branch is partly laid with 75 lbs. I. S. R. F. F. and partly with 90 lbs. R. B. S. F. F. rails.

The sleepers are of the following types :—Stamped steel bowls, cast-iron pots (Fowler's patent box, Walton's Hederstedts and (M. C.), steel trough and wood (sâl, deodar and Australian hard wood).

Ballast.—The main line and branches are ballasted with sand, kunkur, stone, shingle and broken brick.

Fencing.—The line is fenced throughout with the exception of the Balamau-Auhadpur, Rosa-Sitapur, Gajroula-Chandpur, Hapur-Meerut, Rajaka Sahaspur-Sambhal Hatim Sarai and Kotdwara branches and a portion of the Allahabad-Jaunpur branch, Unao-Madhoganj, Lucknow-Sultanpur-Zafarabad Railway, Chandpur-Bijnor-Muazzampur-Narain and Behramghat branches.

Curves.—The sharpest curve on the line is of 6° or 955 feet radius.

Gradients.—The ruling gradient on the main line is 1 in 400 between Lucknow and Moradabad ; 1 in 300 between Moghal Sarai and Lucknow ; 1 in 250 between Lhaksar and Saharanpur ; 1 in 200 between Moradabad and Lhaksar. On the loop line the ruling gradient is 1 in 300 between Benares Cantonment and Lucknow ; 1 in 250 between Moradabad and Delhi ; 1 in 200 between Lhaksar and Hardwar, 1 in 100 on the Kotdwara branch ; 1 in 75 on the Raiwala-Rikhikesh branch and 1 in 500 on the Dalmau-Dariapur branch; 1 in 400 on the Unao-Madhoganj branch, Lucknow-Sultanpur-Zafarabad Branch and Chandpur-Muazzampur Narain branch.

Contracts—

Nil. All the contracts between the Secretary of State and the Railway Company were determined on the 31st December 1924 and the line was brought under direct state management with effect from the 1st January 1925. The Oudh and Rohilkhand railway was amalgamated with the East Indian railway with effect from the 1st July 1925

Rates and fares.—Certain maxima and minima have been fixed by the Government, between the limits of which the Railway Administration can vary the rates and fares quoted for goods and coaching traffic.

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

(*a*) East Indian railway (5′ 6″ gauge)—*concld.*

Statistics of working.—(Those for 1879 will be found in Appendix 38 to the Railway Administration Report for 1907) —

Note.—(i) From 1906, the figures of South Bihar Railway [excepting route mileage and capital outlay] which is shown separately in table (*c*) are included.

(ii) From 1925-26 the figures of Oudh and Rohilkhand Railway (including Cawnpore-Burhwal Link 3′ 3½″ gauge) are included. The figures of Oudh and Rohilkhand Railway from the date of its opening to 1924-25 are shown in table (*e*).

(iii) The amount of sterling liabilities involved in the purchase of railways included in the figures shown in column 3 below against 1933-34 and 1934-35, has been converted at he rates of exchange ruling at the time when the liabilities came into being, as against the statutory rate of exchange *i. e.*, 1s.-6d. previously adopted. From the year 1935-36 onwards the same amount has been reconverted at the latter rate.

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, i.e., outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Payment to make up guaranteed interest on the paid up capital of the A.K. B. K. and F. I. rlys. and of rental to S. B. rly.	Percentage of net earnings on total capital outlay, or capital at charge, given in column (3).	Payment to make up guaranteed interest on the paid up capital of the A. K., B. K. and F. I. railways.	Interest.	Annuity.	Company's share of surplus profits (based on terms of contract, *attributable to each year.*	Gain to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Miles.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	Rs.	Rs.	
1880 .	1,504·25	34,18,12,052	4,29,45,116	2,84,66,874	..	8·33	..	*a*1,96,03,398	..	17,72,690	70,90,786	549	33·71
1881 .	1,506·75	34,67,27,455	4,54,11,472	3,06,38,827	..	8·84	..	30,27,492	1,72,92,000	20,63,867	82,55,468	578	32·53
1882 .	1,506·77	34,83,42,743	4,71,17,594	2,94,15,386	..	8·44	..	31,33,022	1,72,92,000	17,88,073	71,52,291	601	37·57
1883 .	1,504·46	35,02,20,413	4,94,67,085	3,08,77,691	..	8·82	..	33.68,151	1,75,10,887	19,99,731	79,98,922	630	37·58
1884 .	1,509·46	35,34,09,667	4,38,38,714	2,70,76,204	..	7·66	..	34,79,206	1,77,35,384	11,72,323	46,89,291	558	38·24
1885 .	1,514·99	35,61,22,471	4,63,86,889	2,97,35,295	..	8·35	..	36,22,093	1,79,65,714	14,97,276	59,89,105	589	35·90
1886 .	1,514·86	35,80,42,570	4,66,70,853	3,02,20,962	..	8·44	..	37,84,444	1,89,50,137	16,87,259	63,49,039	591	35·25
1887 .	1,514·36	35,85,11,962	4,60,65,661	3,09,98,517	..	8·65	..	38,48,886	1,92,13,333	11,64,693	46,58,773	583	32·71
1888 .	1,513·45	35,82,32,469	4,54,36,902	3,00,27,370	..	8·38	..	38,60,374	2,03,43,530	8,31,847	33,25,386	567	33·91
1890 .	1,525·44	35,98,56,817	4,49,57,901	2,91,14,970	..	8·09	..	39,98,237	2,09,60,000	10,37,019	41,48,078	557	35·24
1891 .	1,525·44	36,00,54,709	4,34,39,355	2,95,24,546	..	8·20	..	39,95,919	2,03,43,530	26,45,392	1,05,81,569	538	32·03
1892 .	1,525·44	35,94,69,179	4,94,35,230	3,56,54,312	..	9·92	..	37,33,297	1,86,94,054	20,88,760	83,55,041	615	27·95
1893 .	1,610·27	36,51,42,775	4,88,55,105	3,48,16,719	..	9·54	..	37,25,754	2,06,47,164	17,04,125	68,16,499	587	28·73
1894 .	1,610·73	37,17,65,626	*b*5,08,44,654	3,60,92,293	..	9·71	..	41,26,889	2,34,46,780	15,37,767	61,59,068	584	29·01
1895 .	1,664·11	37,50,81,624	5,26,89,485	3,64,26,405	..	9·71	..	43,37,988	2,45,89,582	14,29,078	57,30,845	604	30·87
1896 .	1,700·19	38,08,79,764	*c*5,41,50,856	*c*3,78,34,726	..	9·93	..	45,73,671	2,61,01,132	12,45,733	49,81,932	603	30·13
1897 .	1,701·11	38,54,11,272	*d*5,40,69,142	*d*3,67,77,682	..	9·54	..	46,90,562	2,58,59,455	23,87,763	95,51,053	597	31·98
1898 .	1,707·09	39,06,36,442	5,88,28,013	4,14,93,460	..	10·46	..	48,20,238	2,47,34,406	24,99,244	99,96,978	649	29·47
1899 .	1,712·25	40,98,39,605	5,97,96,060	4,08,07,269	..	9·96	..	50,46,514	2,32,64,533	30,09,920	1,20,39,680	658	31·76
1900 .	1,710·67	42,96,85,477	6,35,45,974	4,26,60,018	..	9·93	..	54,63,902	2,21,46,516	18,09,104	1,53,27,450	697	32·87
1901 .	1,840·32	44,51,88,809	6,84,74,972	4,47,15,571	..	10 04	..	60,18,054	2,15,60,963	18,51,450	1,56,32,623	708	34·70
1902 .	1,838·04	45,95,76,136	6,03,96,036	4,57,13,311	..	9·95	..	65,40,878	2,16,82,360	16,19,965	1,26,79,508	733	35·06
1903 .	1,923·35	47,43,55,297	6,77,38,713	4,29,80,833	..	9·06	..	70,34,492	2,16,46,868	18,24,961	1,55,49,461	687	36·55
1904 .	1,935·11	48,80,34,496	6,99,72,700	4,64,35,793	..	9·51	..	74,46,371	2,16,15,000	20,64,276	1,88,99,861	692	33·64
1905 .	1,932·87	50,26,09,029	7,59,71,544	5,06,03,115	..	10·07	..	80,23,978	2,16,15,000	18,02,075	1,60,69,044	749	33·39
1906 .	1,972·30	52,58,72,727	7,50,47,139	4,82,21,979	..	9·17	..	86,75,860	2,16,15,000	18,50,039	1,59,00,545	758	35·74
1907 .	2,165·04	54,79,28,490	8,02,50,910	*e*4,87,53,855	..	8·90	..	93,88,271	2,16,15,000	17,75,310	1,48,54,344	721	38·65
1908 .	2,208·29	56,77,47,625	8,11,29,807	*e*4,84,10,858	..	8·53	..	1,01,66,204	2,16,15,000	14,58,887	1,04,24,422	673	39·74
1909 .	2,213·18	58,74,01,148	8,28,51,108	*e*4,44,26,132	..	7·56	..	1,09,27,823	2,16,15,000	16,39,194	1,29,48,709	682	45·80
1910 .	2,212·07	60,27,01,643	*f*8,28,35,189	*e*4,77,90,961	..	7·93	..	1,15,88,058	2,16,15,000	19,01,703	1,66,23,849	695	41·73
1911 .	2,212·77	60,82,23,218	8,60,42,147	*e*5,20,01,256	..	8·54	..	1,18,60,704	2,16,15,000	21,40,374	1,99,72,242	722	39·01
1912	2,265·86	62,08,94,930	9,22,36,385	*e*5,59,09,018	..	9·00	..	1,21,80,902	2,16,15,000	25,95,359	2,63,35,034	756	38·87
1st gr. of 1913	2,331·09	63,49,50,982	10,15,50,003	*e*6,32,20,565	..	9·96	..	1,26,75,172	54,03,750	5,84,149	56,78,085	810	37·27
1913-14	2,359·40	64,01,66,586	2,58,28,008	*e*1,49,21,567	..	2·33	..	32,55,583	2,16,15,000	24,12,112	2,37,69,564	814	41·77
1914-15	2,424·20	66,70,44,170	10,26,92,832	*e*6,13,38,002	..	9·20	..	1,35,41,326	2,16,15,000	24,04,291	2,36,60,074	789	39·81
1915-16	2,445·63	70,52,95,287	10,35,97,327	*e*6,25,79,018	..	8·87	..	1,48,99,653	2,16,15,000	24,22,809	2,39,19,323	796	38·18
1216-17	2,448·22	71,50,37,347	10,51,90,203	*e*6,39,64,189	..	8·95	..	1,60,07,057	2,16,15,000	28,06,458	2,92,90,413	800	39·16
1917-18	2,495·26	72,11,24,810	11,08,91,903	*e*7,00,05,890	..	9·71	..	1,62,94,019	2,16,15,000	32,52,122	3,55,29,712	828	35·14
1918-19	*g*2,463·77	72,16,13,786	11,77,52,286	*e*7,67,93,908	..	10·64	53,066	1,63,44,008	2,16,15,000	39,66,029	4,55,32,800	890	34·18
1919-20	2,459·35	72,69,63,226	13,47,04,077	*e*8,76,55,340	..	12·06	60,608	1,64,80,303	2,05,34,250	24,67,351	3,17,42,269	1,020	34·25
1920-21	2,460·87	77,21,81,558	13,09,77,991	*e*7,18,28,012	..	9·30	1,12,429	1,69,71,713	1,72,92,000	8,54,125	2,94,58,330	992	45·13
1921-22	2,459·10 *h*	87,61,86,794	13,99,59,048	*e*6,55,39,139	..	7·48	44,903	1,78,89,781	1,72,92,000	3,98,007	1,02,33,205	1,060	52·99
1922-23	2,461·95 *h*	90,66,18,437	13,29,02,157	*e*4,83,20,439	..	5·33	83,735	2,03,13,492	1,72,92,000	7,13,724	1,72,14,683	1,003	63·37
1923-24	2,478·95 *h*	93,13,48,000	15,76,51,214	*e*6,75,98,011	..	6·18	1,38,825	2,22,38,779	1,72,92,000	7,61,468	2,02,85,420	1,185	63·25
1924-25	2,481·15 *h*	96,88,02,462	16,15,50,681	*e*6,25,57,744	..	6·46	1,38,546	2,40,80,310	*j*	6,24,743	2,89,63,654	1,213	61·02
1925-26	2,485·08 *h*	99,18,71,478	17,08,00,274	*e*6,77,32,833	..	6·83	69,898	3,80,74,538	..	..	2,99,15,114	1,281	60·04
1926-27	3,817·19 *k*	1,29,54,99,531	19,09,08,478	*e*7,84,64,328	..	6·06	54,925	4,84,94,289	..	..	2,53,18,436	987	60·58
1927-28	3,850·54 *l*	1,34,73,85,331	19,72,45,417	*e*7,61,57,578	..	5·65	27,476	5,08,16,666	..	..	3,27,30,234	965	61·15
1928-29	3,883·21 *m*	1,40,17,64,488	20,69,26,832	*e*8,60,47,713	..	6·14	46,332	5,32,71,147	..	..	3,36,19,600	1,025	58·28
1929-30	4,055·58 *n*	1,45,30,36,501	20,42,78,101	*e*8,05,66,713	..	5·54	1,06,691	5,68,40,422	..	.	1,41,14,851	969	60·32
1930-31	4,092·00 *o*	1,49,02,88,224	19,67,99,317	*e*7,24,83,242	..	4·86	1,95,088	5,81,73,303	..	..	—8,29,985	925	62·96
1931-32	4,167·00 *p*	1,44,95,91 430	18,27,57,046	*e*6,14,67,046	5,36,280	4·24	1,31,003	6,17,60,751	..	..	—25,33,343	843	66·36
1932-33	4,222·94 *q*	1,46,03,97,574	17,34,84,013	6,03,09,771	6,09,996	4·13	2,08,215	6,22,33,118	..	..	—8,70,871	790	65·27
1933-34	4,285·56 *r*	1,46,38,80,583	17,57,34,124	6,14,65,593	5,99,191	4·20	1,99,865	6,17,37,273	..	..	47,19,126	790	65·04
1934-35	4,286·88 *s*	1,42,65,85,926	18,21,73,365	6,61,49,479	5,61,031	4·64	1,59,526	6,08,69,322	..	..	1,00,90,363	817	63·62
1935-36	4,283·85 *t*	1,43,30,94,623	18,80,15,808	7,03,23,521	*u* 5,67,543	4·91	1,67,890	5,96,65,615	..	..	1,02,05,138	842	62 69
1936-37	4,283·37 *v*	1,46,06,63,729	*w* 18,78,85,196	7,02,29,748	*u* 5,86,139	4·81	1,88,211	5,94,38,471	..	..	1,74,86,805	839	62·60
1937-38	4,283·07	1,46,50,32,354	*w* 19,51,12,612	7,70,32,925	*u* 8,14,927	5·26	4 16,999	5,87,31,193	..	..	2,44,37,714	874	60·56
1938-39	4,282·94 *x*	14,698,61,093	*w* 21,07,52,287	8,39,26,933	*u* 8,01,928	5·71	4,04,000	5,86,87,291	..	..	1,87,59,260	944	60·18
	4,282·99 *y*	1 47,21,60,920	*w* 20,76,98,983	7,80,77,450	7,45,864	5·30	3,42,000	5,85,72,326	..	..		930?	62·41

a Interest in 1880 includes annuity charges which cannot be separated.

b Includes arrear credits for substantial improvements, Rs. 10,49,127.

c Includes Rs. 14,530 realised from Palmer's Trust Estate.

d Excludes Rs. 1,000 paid to Mr. Patterson, Law Agent, as remuneration in respect of this amount realised from the Palmer's Trust Estate.

e Excludes the annual rental paid to the South Bihar Railway Company and other charges deducted from net earnings.

f Includes arrear credits for substantial improvements, Rs. 26,19,763.

g The decrease is due to the dismantling of 31·55 miles, Bhagalpur to Mandar Hill, of the Bhagalpur-Bausi branch.

h Including premia paid by Government in the purchase of the line.

i Including Rs. 16,55,961 on account of deficiency during second half of 1921-22 with interest at 4½ per cent. per annum for first half of 1922-23 made good out of the net earnings for 1922-23.

j The capital account was permanently debited with the balance of capital liability outstanding on 31st March 1924 in respect of the purchase of the railway under redemption by annuities and Sinking Fund on which full interest is charged in column 8. The figures prior to 1924-25 are converted at the contract rate.

k Excludes the capital at charge of Naini-Jubbulpore and Delhi-Ghaziabad Sections transferred to Great Indian Peninsula and North Western Railways respectively and Rs. 14,744 on account of capital expenditure on Delhi-Umballa-Kalka Railway transferred to North Western Railway without financial adjustment.

l Includes outlay to end of 1926-27 on Rikhikesh Road construction and Central Indian Coal Fields construction.

m Includes outlay of Rs. 21,46,174 on Tatanagar Workshops.

n Includes outlay of Rs. 20,31,57 on properties in Cawnpore are transferred from the Great Indian Peninsula Railway without financial adjustment.

o Includes capital outlay for Anuppur-Bijuri Section.

p Includes credit on Agra City and on all properties on the West Bank of Jumna River transferred to G. I. P. Railway without financial adjustment.

q Includes credit on (*i*) Agra City and on all properties on the West Bank of the Jumna River transferred to G. I. P. Railway without financial adjustment and (*ii*) Redemption of liabilities of O. & R. Rly. Discount Sinking Fund to end of 1931-32.

r Includes credit on (*i*) Agra city and on all properties on the West Bank of Jumna river transferred to G. I. P. Rly. without financial adjustment and (*ii*) redemption of liabilities of O. & R. Rly. Discount Sinking Fund to end of 1932-33.

s Includes debit of Rs. 2,89,773 on account of E. B. Railway Press transferred to E. I. Railway without financial adjustment and excludes Rs. 98,95,920 on account of figures transferred to Accounts Officer, Railway Collieries, without financial adjustments.

t Includes Rs. 2,755 on account of E. B. Railway Press funt transferred to E. I. Railway without financial adjustment during 1934-35; and Rs. 27,23,03,845 on account of purchase of line.

u This represents (1) the South-Bihar Railway rental charged to the head "Payment to Worked Lines" and (2) the payment of rebate to A. K., B. D. R., B. P., B. K., and F. I. Railways charged to the head "(15c) -subsidised Companies" as under :—

Year.	(1) Rs.	(2) Rs.
1934-35 . .	3 99,653	1,67,890
1935-36 . .	3,97,928	1,88,211
1936-37 .	3,97,928	4,16,999
1937-38 . .	3,97,928	4,04,000
1938-39 . .	4,03,864	3,42,000

v Includes credits of Rs. 54,38,807 on a/c of the difference between the original rupee equivalent and the actual amount of rupees spent on the discharge of 3½ million debentures, which were taken over as state liability in 1924-25 when the E. I. Railway was brought under state-management.

w Includes the amount credited to E. I. Railway by the B. N. Railway in respect of the Anuppur-Chirimiri Section as under :—

	Rs.
1935-36 . .	1,83,397
1936-37 .	2,61,155
1937-38 . .	3,49,985
1938-39 . .	4,49,060

x, Include Rs. 4,32,190 and Rs. 52 29,000 transferred from G. I. P. railway without financial adjustment and from Controller of Railway Accounts book on account of exchange in respect of Capital transactions in England respectively and excludes Rs 2,12,077 transferred to Railway Colliery on a/c of coal Deptt. Buildings.

y. (i) Includes Rs. 53,780 cost of Saloon No. 19 transferred from N.W. Ry. without financial adjustment.
(ii) Excludes Rs. 29,82,766 cost of telegraph wires removed from the Capital at charge of E. I. Ry.
(iii) Excludes Rs. 9,27,527 cost of Khana..pura yard transferred to N. W. Ry. without financial adjustment.

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

(*b*) Hardwar-Dehra railway (5′ 6″ gauge)—

Managing Agents.—MESSRS. GILLANDERS ARBUTHNOT AND Co., Calcutta.

Date of registration of the Company.—12th March 1897.

Progress in opening—

Section of railway.	Date of opening	Miles.	Total.
1	2	3	4
Hardwar to Dehra	1-3-00	32·04	32·04

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed I. S. R. steel rails excepting 3 miles 90 lbs. R. B. S. F. F. rails on deodar, sal and chir wood and Fowler box sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,000 feet.

Gradients.—The ruling gradient is 1 in 75.

Agreement and contract—

Agreement, dated the 6th January 1897, *between the Secretary of State and Messrs. Gillanders, Arbuthnot and Company of Calcutta* (called " the Promoters "), as to the grant of a provisional concession for the construction of the Hardwar-Dehra Branch railway.

Contract, dated the 26th March 1897 (called the scheduled contract), *between the Secretary of State and the Hardwar-Dehra Railway Company*, as to the construction, maintenance and working of the Hardwar-Dehra Branch railway.

Main provisions of agreement and contract—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—The line is the property of the Hardwar-Dehra Branch Railway Company, and was constructed, from funds supplied by the Company, by the Government, who maintain, stock and work it through the agency of the East Indian railway.

The Government guarantee interest at 3 per cent. per annum on the capital expenditure, and also undertake to allow to the Company, in any year in which it does not receive the minimum dividend of 3 per cent. from the earnings of the line, the sum of Rs. 3,600 for such year for or towards management and office expenses.

(iii) *Terms of working.*—For maintenance, provision of rolling-stock and working, the East Indian Railway Administration retains 50 per cent. of the gross earnings of the Branch line.

(iv) *Distribution of profits.*—The surplus profits in each year remaining after repayment to the Government of the amount of the guaranteed interest for the year are to be divided equally between the Government and the Company.

(v) *Rates and fares.*—Certain maxima and minima have been fixed by the Government, between the limits of which the working agency (*viz.*, the East Indian railway) can vary the rates and fares quoted for goods and coaching traffic.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Nil.

(vii) *Power of the Government to determine contract.*—The Government may determine the contract, on twelve months' notice, either on the 31st December 1919 or on the 31st December in the last year of any subsequent period of ten years, by paying to the Company a sum equal to 25 times the average yearly net earnings of the Company during the last preceding three years, provided that

6 EAST INDIAN RAILWAY SYSTEM—*contd.*

(b) Hardwar-Dehra railway (5′ 6″ gauge)—*concld.*

Main provisions of agreement and contract—*concld.*

such sum shall not exceed by more than 20 per cent., nor is less than the total capital expenditure.

N.B.—It has been decided not to give notice of purchase of the Railway on 31st December 1929.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—None specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings	Net earnings.	Percentage of net earnings on total capital outlay given in column (3)	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		
1900	32·04	25,67,093	1,60,485	80,243	3·13	..	..	..	115	50·00	Interest up to 1900 was charged to capital and net earnings of 1900 were credited to capital in reduction of interest charges.
1901	32·04	28,12,301	2,13,456	1,06,728	3·80	84,222	11,254	+11,254	128	50·00	
1902	32·04	28,36,486	2,52,485	1,26,242	4·45	85,048	20,597	+29,597	152	50·00	
1903	32·04	28,44,541	2,62,719	1,31,360	4·62	85,260	23,050	+23,050	158	50·00	
1904	32·04	29,12,992	2,63,612	1,31,806	4·52	86,777	22,515	+22,514	158	50·00	
1905	32·04	29,20,650	3,13,476	1,56,738	5·37	87,590	34,574	+34,574	188	50·00	
1906	32·04	29,24,284	3,34,110	1,67,055	5·71	87,688	39,683	+39,684	201	50·00	
1907	32·04	29,27,942	3,86,535	1,93,283	6·60	87,822	52,730	+52,731	232	50·00	
1908	32·04	29,44,092	3,76,334	1,88,167	6·39	88,185	49,991	+49,991	226	50·00	
1909	32·04	29,65,357	3,68,624	1,84,312	6·21	88,734	47,789	+47,789	221	50·00	
1910	32·04	29,85,633	4,04,443	2,02,221	6·77	89,548	56,337	+56,336	243	50·00	
1911	32·04	30,10,716	4,31,161	2,15,581	7·16	90,017	62,782	+62,782	259	50·00	
1912	32·04	30,18,164	4,40,299	2,20,149	7·29	90,541	64,804	+64,804	264	50·00	
1st qr. of 1913	32·04	30,18,790	1,21,302	60,651	2·01	22,641	19,005	+19,005	291	50·00	
1913-14	32·04	30,22,601	4,85,346	2,42,673	8·03	90,621	76,026	+76,026	291	50·00	
1914-15	32·04	30,26,584	4,66,506	2,33,253	7·71	90,749	71,252	+71,252	280	50·00	
1915-16	32·04	30,27,840	5,09,355	2,54,678	8·41	90,825	81,926	+81,927	306	50·00	
1916-17	32·04	30,34,255	5,54,382	2,77,691	9·15	91,021	93,335	+93,335	333	50·00	
1917-18	32·04	30,40,387	5,46,330	2,73,165	8·98	91,169	90,998	+90,998	328	50·00	
1918-19	32·04	30,53,515	6,61,504	3,30,752	10·83	91,436	1,19,658	+1,19,658	397	50·00	
1919-20	32·04	30,69,303	6,99,437	3,49,719	11·39	91,925	1,28,897	+1,28,897	420	50·00	
1920-21	32·04	30,98,840	7,38,764	3,69,382	11·92	92,550	1,38,416	+1,38,416	443	50·00	
1921-22	32·04	31,35,748	8,04,530	4,02,265	12·83	93,719	1,54,273	+1,54,273	483	50·00	
1922-23	32·04	32,10,986	8,33,868	4,06,162	12·65	94,855	1,55,654	+1,55,653	500	51·29	
1923-24	32·04	32,45,716	8,02,428	3,90,287	12·02	1,00,840	1,44,724	+1,44,723	482	51·36	
1924-25	32·04	32,56,712	8,45,497	4,12,311	12·66	1,03,175	1,52,497	+1,56,639	505	51·23	
1925-26	32·04	33,03,693	9,46,018	4,62,038	13·99	1,05,958	1,74,490	+1,81,590	568	51·16	
1926-27	32·04	33,11,250	8,32,762	4,04,029	12·20	1,07,991	1,43,672	+1,52,366	500	51·48	
1927-28	32·04	33,96,211	8,84,963	4,32,144	12·72	1,09,956	1,56,456	+1,65,732	531	51·16	
1928-29	32·04	33,88,181	7,91,006	3,84,240	11·34	1,16,367	1,26,794	+1,41,079	475	50·00	
1929-30	32·04	34,08,703	7,98,803	3,89,391	11·42	1,15,614	1,30,127	+1,43,050	480	50·00	
1930-31	32·04	34,45,258	7,53,254	3,76,627	10·93	1,25,220	94,942	+1,46,130	452	50·00	
1931-32	32·04	34,63,410	7,21,385	3,60,692	10·41	1,03,889	1,16,447	+1,28,402	433	50·00	
1932-33	32·04	34,58,127	7,35,844	3,67,922	10·64	1,08,054	1,16,342	+1,31,967	442	50·00	
1933-34	32·04	34,82,011	7,84,344	3,92,172	11·26	1,04,175	1,43,999	+1,43,998	471	50·00	
1934-35	32·04	35,08,092	7,68,605	3,84,303	10·95	1,04,924	1,39,690	+1,39,689	460	50·00	
1935-36	32·04	35,60,367	7,51,877	3,75,939	10·56	1,06,750	1,34,595	+1,34,594	449	50·00	
1936-37	32·04	35,87,728	7,65,862	3,82,931	10·67	1,07,300	1,37,815	+1,37,816	458	50·00	
1937-38	32·04	36,02,488	7, 0,320	3,75,160	10·41	1,07,874	1,33,644	+1,33,642	449	50·00	
1938-39	32·04	36,12,829	7,15,567	3,57,784	9·90	1,08,264	1,24,758	+1,24,762	428	50·00	

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

(c) South Bihar railway (5′ 6″ gauge)—

Chairman.—Lieut.-Col. H. BONHAM-CARTER, R.E.
Secretary.—PERCY A. CORY, Esq., O.B.E.
Offices.—25, Buckingham Palace Road, London, S. W. 1.
Date of registration of the Company.—4th July 1895

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total
1	2	3	4
Luckeeserai to Wazirganj	5-7-99	75·82*	75·82*
Wazirganj to Gya	10-7-99		

* Excludes 2·70 miles of double line included in E. I. Rly.

Details of construction—

Permanent-way.—The permanent-way consists of double-headed steel rails, 75-lbs. to the yard, laid on wooden sleepers and cast iron chairs and Denham-Olpherts' cast iron plate sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is fenced only near villages, at stations and for a short distance on each side of level crossings.

Curves.—The sharpest curve is of 1,685 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Contracts—

On the termination of the contracts with the late East Indian Railway Company the line was brougee under direct State management with effect from the 1st January 1925, the Secretary of State having the authority to maintain and work the line either by the agency of a railway company or the State under the terms of the following contracts :—

Dated the 7th August 1895 (called the principal contract), *between the Secretary of State and the South Bihar Railway Company*, as to construction.

Dated the 21st April 1903 (supplemental to the contract of 1895), *between the Secretary of State and the South Bihar Railway Company*, as to the adoption of 1*s.* 4*d* per rupee as the " prescribed " rate of exchange.

Dated the 11th December 1906 (supplemental to the contract of 1895), *between the Secretary of State and the South Bihar Railway Company*, as to the relinquishment of the South Bihar railway to the Secretary of State and yearly payment to the Company until date of determination of the contract of the 7th August 1895.

Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—
(iii) *Terms of working.*—
(iv) *Distribution of profits.*—
Government constructed the line from funds provided by the South Bihar Railway Company, and maintained, stocked and worked it through the agency of the late East Indian Railway Company up to the 31st December 1905, for a certain proportion of its gross earnings; and, by agreement with that Company, also allowed to the South Bihar Railway Company, by way of rebate, a percentage of the East Indian Railway's share of the receipts from traffic interchanged between the two railways towards making up an amount equal to 4 per cent. interest for each half-year on the actual capital expenditure (subject to certain limits) on the South Bihar railway.

With effect from the 1st January 1906 the South Bihar Railway Company leased its line to the Government for a yearly sum of £30,000, payable by half-yearly payments of £15,000, at the end of each calendar half-year, in substitution of the corresponding provisions of the principal contract of the 7th August 1895.

(v) *Rates and fares—*
(vi) *Special obligations as to the conveyance of.—*
(*a*) Mails, troops, high Government officials and Government stores.—
(*b*) Government bullion and coin and the persons in charge thereof.—
as under the East Indian railway.

(vii) *Power of the Government to determine contracts.*—Government may determine the South Bihaf Railway Company's contracts on the 30th June 1919, or on the 30th June in the last year of any ubsequent period of 10 years from that date, by giving twelve months' notice. In case of such letermination the Government will pay to the Company in England £684,580 as being the capital expended on the undertaking with the authorisation of the Secretary of State.

N.B.—It has been decided not to give notice of purchase to the company, but to allow the contract to continue for another 10 years from 30th June 1929.

(viii) *Power of the South Bihar Railway Company to surrender contracts.*—Nil.

(ix) *Term of South Bihar Railway Company's contracts if not determined under* (vii)].—Not specified.

6. EAST INDIAN RAILWAY SYSTEM—*contd.*

(c) South Bihar railway (5′ 6″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from the East Indian Railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1899 .	78·83	1,18,16,730	2,03,328	1,32,163	1·12	33,403	1,65,566	1·40	100	35·00
1900 .	78·76	1,23,15,110	4,67,133	3,03,636	2·47	1,44,404	4,48,040	3·64	114	35·00
1901 .	78·76	1,23,66,533	5,14,870	3,08,822	2·50	1,22,082	4,36,904	3·53	125	40·02
1902 .	78·76	1,19,88,612	4,99,809	2,74,895	2·29	1,35,445	4,10,340	3·42	122	45·00
1903 .	78·76	1,20,01,897	5,24,605	2,88,533	2·40	1,57,708	4,46,241	3·72	128	45·00
1904 .	78·76	1,19,72,914	5,70,358	3,13,697	2·62	1,65,382	4,79,079	4·00	138	45·00
1905 .	78·76	1,19,77,154	5,55,199	3,05,360	2·55	1,72,721	4,78,081	3·99	135	45·00
1906 .	78·76	1,19,74,947								
1907 .	78·76	1,19,77,154								
1908 .	79·19	1,19,77,154								
1909 .	79·19	1,19,77,154								
1910 .	79·19	1,19,77,154								
1911 .	79·19	1,19,77,154								
1912 .	79·19	1,19,77,154								
1st qr. of 1913	79·19	1,19,77,154								
1913-14 .	79·19	1,19,77,154								
1914-15 .	79·19	1,19,77,154								
1915-16 .	79·19	1,19,77,154	See "terms of working" above.							
1916-17 .	79·19	1,19,77,154								
1917-18 .	79·19	1,19,77,154								
1918-19 .	79·19	1,19,77,154								
1919-20 .	79·19	1,19,77,154								
1920-21	79·19	1,19,77,154								
1921-22	79·19	1,19,77,154								
1922-23	79·19	1,19,77,154								
1923-24	79·19	1,19,77,154								
1924-25 .	79·19	1,19,77,154								
1925-26	79·19	1,19,77,154								
1926-27 .	79·19	1,19,77,154								
1927-28 .	79·26	1,19,77,154								
1928-29 .	79·26	1,19,77,154								
1929-30 .	79·27	1,19,77,154								
1930-31 .	75·82(*a*)	1,19,77,154(*b*)								
1931-32 .	75·82(*a*)	1,19,77,154(*b*)								
1932-33 .	75·82(*a*)	1,19,77,154(*b*)								
1933-34 .	75·82(*a*)	1,19,77,154(*b*)								
1934-35 .	75·82	1,19,77,154(*b*)								
1935-36 .	75·82	1,19,77,154(*b*)								
1936-37 .	75·82	1,19,77,154(*b*)								
1937-38 .	75·82	1,19,77,154(b)								
1938-39 .	75·82	1,19,77,154(b)								

(*a*) 3·45 miles length between Manpur and Gaya excluded from S. B. Rly. and included in E. I. Rly.
(*b*) Including expenditure in England.

(*d*) Cawnpore-Burhwal link (3′ 3⅜″ gauge)—

The construction of the Cawnpore-Burhwal (3′ 3⅜″ gauge) link was sanctioned as a part of the project for linking up the 3′ 3⅜″ gauge systems of Northern India.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Burhwal to Daliganj	24-11-96	*35·31		*Including the length, Burhwal to Bara Banki, 16·79 miles, laid on a mixed (5′ 6″ and 3′ 3⅜″) gauge.
Aishbagh to Cawnpore	25-4-97	45·03		
Total . .	..	..	80·34	

Details of construction—

Permanent-way.—Where the line is not mixed gauge it is laid with new 50-lb. steel rails on sâl and deodar sleepers.

Ballast.—The line is ballasted with kunkur, brick and stone.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve has a radius of 573 feet.

Gradients.—The ruling gradient is 1 in 400.

6. EAST INDIAN RAILWAY SYSTEM—*concld.*

(*d*) Cawnpore-Burhwal link (3′ 3⅜″ gauge)—*concld.*

Contract—

The line is owned by the State. The Bengal and North Western Railway Company exercises running powers over it under an agreement with the Oudh and Rohilkhand railway (now East Indian Railway) dated the 21st February 1902, which provides that the Company will haul its trains and traffic over the link and pay to the Oudh and Rohilkhand railway (now East Indian Railway) 80 per cent., which has, with effect from the 1st July 1905, in pursuance of Railway Board's letter No. R. T.-178, dated the 30th June 1905, been reduced to 75 per cent. of the gross receipts arising therefrom.

Statistics of working :—Included with the East Indian Railway.

(*e*) Statistics of the working of the Oudh and Rohilkhand railway :—

NOTE.—From 1889 the figures of Cawnpore Burhwal (3′-3⅜″ gauge) link are included. From 1925-26 the figures are included in those of the East Indian Railway in table (*a*).

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction. *	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay or capital at charge, given in column. (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1867	..	..	..	..	..	..	..	74	106·97
1868	..	..	..	..	..	..	..	120	64·54
1869	..	..	..	..	..	..	..	97	81·74
1870	..	..	..	..	..	..	..	112	227·93
1871	..	..	..	..	..	..	..	117	69·31
1872	..	..	..	..	..	..	..	56	68·58
1873	..	..	..	..	..	..	..	56	72·91
1874	..	..	..	..	..	..	..	72	64·41
1875	..	..	..	..	..	..	..	97	59·71
1876	..	..	..	..	..	..	..	120	63·93
1877	..	..	..	..	..	..	..	153	52·38
1878	..	..	..	..	..	..	..	163	54·23
1879	..	5,80,35,764	43,44,843	18,19,936	3·14	28,00,000	—9,80,064	153	58·11
1880	..	6,02,24,081	44,55,150	19,04,409	3·16	28,19,946	—9,15,537	157	57·25
1881	..	6,25,30,935	49,28,730	19,75,699	3·16	29,14,137	—9,38,438	173	59·91
1882	..	6,52,79,840	52,62,844	18,01,371	2·76	30,67,622	—12,66,251	185	65·77
1883	..	7,07,69,446	54,56,255	24,80,362	3·51	31,35,495	—6,55,133	192	54·54
1884	..	7,91,43,383	52,75,198	23,26,146	2·94	41,14,587	—17,88,441	182	55·99
1885	..	8,54,34,426	55,37,369	19,05,361	2·23	46,53,333	—27,47,972	176	65·59
1886	..	8,95,12,775	65,05,408	28,60,755	3·20	51,88,014	—23,27,259	180	56·02
1887	..	9,17,06,668	66,46,213	31,35,249	3·42	53,98,339	—22,63,090	186	52·83
1888	..	9,18,41,649	70,77,053	30,16,005	3·28	51,67,494	—21,51,489	197	57·38
1889	692·55	9,22,32,226	75,39,683	42,04,076	4·56	49,71,898	—7,67,822	209	64·24
1890	692·55	9,27,89,280	73,81,396	37,54,478	4·05	44,23,109	—6,68,632	205	49·14
1891	692·55	9,28,38,358	85,64,209	49,42,458	5·32	47,25,666	+2,16,792	238	44·29
1892	692·55	9,51,44,770	85,42,836	50,16,329	5·27	52,73,411	—2,63,082	237	41·28
1893	741·11	11,09,17,292	87,16,926	50,17,053	4·97	55,01,058	—4,84,005	239	42·44
1894	796·64	10,28,87,184	1,05,18,836	57,36,138	5·58	63,11,201	—5,74,063	262	45·47
1895	797·18	10,65,05,148	1,02,94,880	52,55,948	4·93	64,26,370	—11,70,422	248	48·95
1896	830·15	10,92,69,485	86,97,076	43,50,907	3·98	61,30,729	—17,79,822	209	49·97
1897	891·97	11,44,19,239	85,15,856	36,96,778	3·23	59,73,486	—22,80,708	186	56·59
1898	1,030·36	11,66,56,000	98,51,599	53,07,727	4·55	58,76,247	—5,68,520	190	46·12
1899	1,030·36	12,23,50,210	1,11,38,990	60,76,595	4·97	59,75,202	+1,01,393	208	45·45
1900	1,101·56	12,57,60,656	1,15,15,132	55,91,727	4·45	62,28,185	—6,36,458	209	51·44
1901	1,118·94	12,89,85,151	1,32,54,991	72,20,007	5·60	63,12,044	+9,07,963	231	45·53
1902	1,119·24	13,66,82,842	1,31,65,792	64,11,336	4·69	64,79,103	—67,767	230	51·30
1903	1,180·79	14,54,28,164	1,39,49,922	72,31,862	4·97	68,40,953	+3,90,909	232	48·16
1904	1,237·65	14,96,63,929	1,52,96,206	71,33,117	4·76	70,54,120	+78,997	241	53·37
1905	1,244·65	15,37,91,910	1,53,85,913	63,43,667	4·12	71,68,431	—8,24,764	238	58·77
1906	1,292·16	15,71,99,731	1,64,67,329	78,15,731	4·97	75,66,010	+2,49,721	249	52·54
1907	1,302·83	16,40,20,116	1,81,93,069	65,62,413	4·00	70,99,564	—5,37,151	269	63·93
1908	1,302·83	17,17,49,978	1,61,61,543	50,29,153	2·93	74,73,210	—24,54,057	239	68·88
1909	1,310·52	17,78,51,571	1,61,86,594	45,93,282	2·58	76,42,849	—30,59,567	238	72·76
1910	1,406·75	18,58,11,981	1,83,03,844	88,80,832	4·78	78,34,486	+10,46,346	253	51·48
1911	1,513·77	19,51,23,398	2,03,88,454	1,04,88,468	5·38	80,09,802	+24,78,666	256	48·56
1912	1,604·14	20,17,91,276	2,45,19,400	8,39,76,826	6·92	90,21,621	+49,55,205	294	43·00
1st qr. of 1913.	1,604·14	20,24,29,541	61,06,475	28,60,729	1·41	21,63,489	+6,96,240	93	51·35
1913-14†	1,638·33	21,64,74,673	2,41,23,950	1,23,21,631	5·69	91,48,838	+31,72,793	283	56·71
1914-15†	1,682·00	22,15,79,383	2,08,24,033	91,22,888	4·12	93,51,473	—2,28,585	238	48·92
1915-16	1.606·87	21,46,85,603	2,23,58,588	1,12,50,582	5·24	91,53,246	+20,97,336	268	49·68
1916-17	1,606·87	21,52,10,491	2,63,18,738	1,50,41,365	6·99	89,71,560	+60,69,805	318	42·85
1917-18	1,592·29	21,52,66,333	2,85,32,134	1,76,54,269	8·20	91,89,367	+84,64,902	345	38·13
1918-19	1,592·29	21,65,65,331	3,29,56,941	1,93,85,777	8·95	92,23,329	+1,08,62,448	398	41·18
1919-20	1,592·29	22,11,50,190	3,16,06,119	1,37,60,696	6·22	93,27,685	+44,33,011	382	56·41
1920-21	1,577·23	‡23,84,42,000	3,20,66,144	1,30,15,004	5·45	83,41,998	+46,73,006	391	59·41
1921-22	1,593·39	‡24,52,72,872	3,34,53,899	87,46,135	3·57	99,73,020	—12,26,885	204	73·86
1922-23	1,590·76	‡25,29,51,340	3,84,85,745	1,31,49,354	5·42	1,03,41,479	+28,07,875	466	65·83
1923-24	1,590·48	31,41,86,438	3,64,22,070	1,08,19,862	3·44	1,06,35,867	+1,83,995	441	70·29
1924-25	1,588·51	31,97,43,935	3,66,74,699	93,28,572	2·92	1,07,17,312	—13,88,740	442	74·56
1925-26	Included under East Indian Railway 5′ 6″ gauge from 1925-26 and onwards.								

*From 1923-24 the figures in this column represent the total capital at charge including liabilities involved in the purchase of the line converted at 1*s.* 4*d.* per rupee.

†Includes the Cawnpore-Banda Railway which from 1915-16 was transferred to the Great Indian Peninsula Railway.

‡Including premia paid by Government in the purchase of the line.

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM.

Lines comprised in the system.—The Great Indian Peninsula railway system is made up of—

	Open line. Miles.	Under construction or sanctioned for construction. Miles.	Total. Miles.
(*a*) Great Indian Peninsula Railway (5′ 6″ gauge)	3,133·88	..	3,133·88
(*b*) Bhopal-Itarsi railway (5′ 6″ gauge)	56·64	..	56·64
(*c*) Bhopal-Ujjain railway (5′ 6″ gauge)	113·46	..	113·46
(*d*) Bina-Goona Baran railway (5′ 6″ gauge)	147·07	..	147·07
(*e*) Dharwah-Pusad railway (2′ 6″ gauge)	42·80	..	42·80
(*f*) Dhond-Baramati railway (2′ 6″ gauge)	27·30	..	27·30
(*g*) Ellichpur-Yeotmal railway (2′ 6″ gauge)	117·81	..	117·81
(*h*) Pachora-Jamner railway (2′ 6″ gauge)	34·62	..	34·62
(*i*) Pulgaon-Arvi railway (2′ 6″ gauge)	21·83		21·83
Total	3,695·41	..	3,695·41

Running powers—

Home line over foreign lines :—

B. B. and C. I. Railway.—Mahim to Bandra for local trains only 1·48 miles		1·48
E. I. Railway.—Naini down outer to Allahabad for passenger and Goods trains 5·27 miles		5·27
N. W. Railway.—Kilokri to Ajmer Gate cabin for passenger and goods trains 5·55 miles		8·88
Ajmer Gate Cabin to New Delhi (Sadar) Goods yard for Goods trains 0·94 „		
Ajmer Gate Cabin to Delhi main Station for Passenger trains 2·39 „		
B. N. Railway.—Nagpur to Itwari Bazar for Goods trains 2·39 „		2·39
Total		18·02

Foreign lines over home line :—

B. B. & C. I. Railway.—Dadar Junction to Carnac Bridge for Goods trains 4·24 miles, Mahim to Wadala for passenger and goods trains 1·23 miles, Muttra Junction to revised junction point at miles 949-487 beyond Okhla for passenger and goods trains 82·923 miles, Fatehpur Junction to Belanganj for goods trains 3·03 miles.	91·43
E. I. Railway.—Jumna Bridge to Agra Cantt. for passenger and Goods trains 4·25 miles	29·23
Agra Cantt. to Idgah for Goods trains 0·98 miles	
Naini to Sankargarh for Ballast trains 24·00 miles	
Total	120·66

(*a*) Great Indian Peninsula railway (5′ 6″ gauge)—

The Great Indian Peninsula railway comprises the line formerly owned by the old Guaranteed Company of that name in amalgamation with that of the late Indian Midland Railway Company.

The property owned by the old guaranteed Great Indian Peninsula Railway Company was purchased by the State in 1900 and the contract between the Secretary of State and the Indian Midland Railway Company, dated the 22nd October 1885, was determined by the Secretary of State on the 31st December 1910. The amalgamated lines formed part of the Great Indian Peninsula railway undertaking which was worked by the reconstituted Great Indian Peninsula Railway Company up to 30th June 1925, when all the contracts then subsisting between the Secretary of State and the Company were determined and the line was brought under State management with effect from the 1st July 1925.

The Gwalior Light Railway was worked by the Great Indian Peninsula Railway Company up to 30th June 1913, after which date the working was taken over by the Gwalior Darbar.

G. I. P. RAILWAY SYSTEM.

REFERENCES.

5'-6" 2'-6"&2'-0"

G.I.P. Railway

Indian State lines

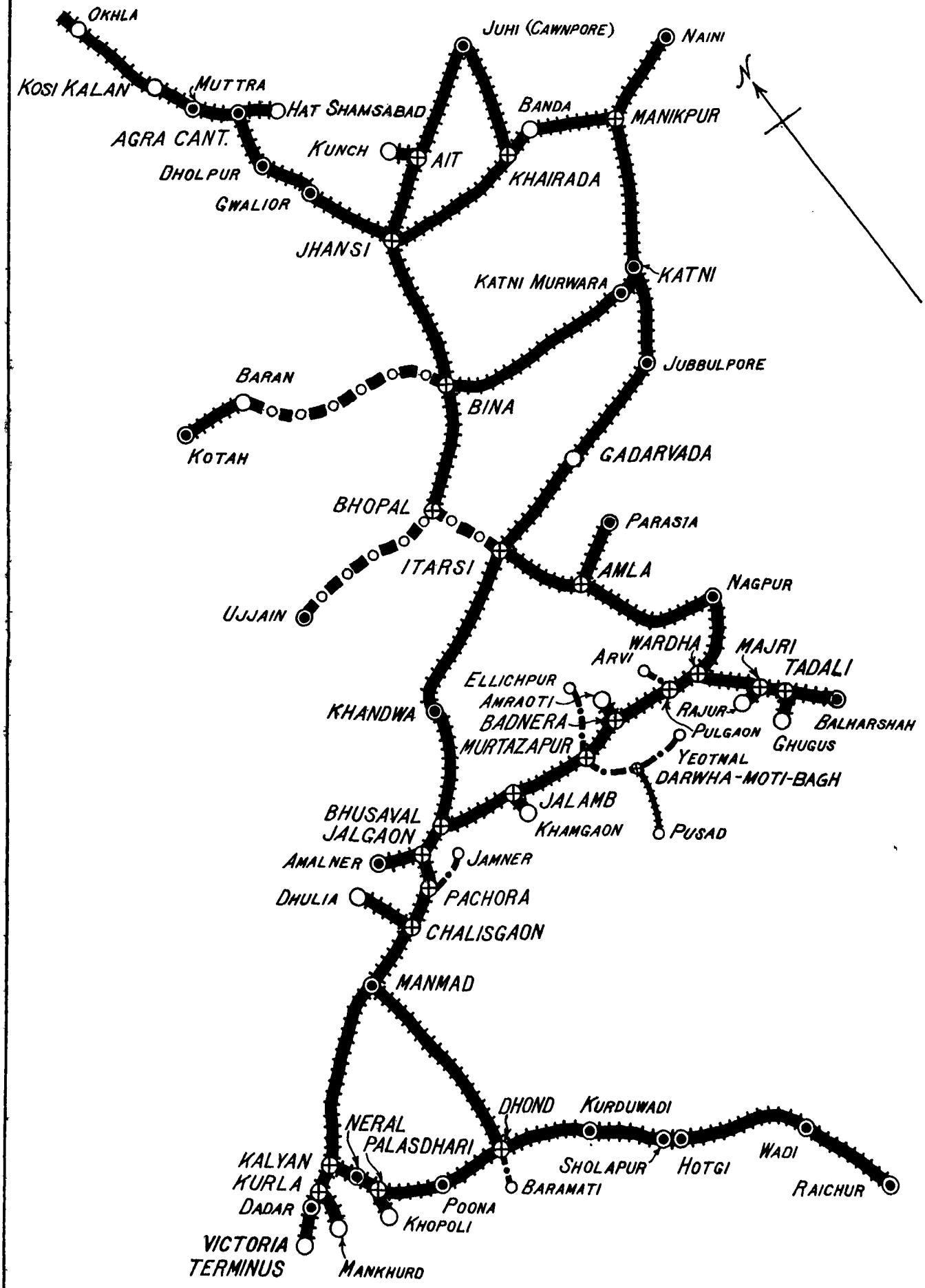
Private Companies' lines

Home, Branch and Local line Junctions

Junctions connecting Foreign lines

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.



7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*a*) Great Indian Peninsula railway (5′ 6″ gauge)—*contd.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
GREAT INDIAN PENINSULA RAILWAY PROPER—					(*a*) *Minus* 0·65 mile Correction due to actual measurement.
NORTH-EAST LINE—					
Main line—					
Buffer Stop—Mile 0	53	0·20			
Victoria Terminus to Thana	18-4-53	21·79			
Thana to Kalyan	1-5-54	(*a*) 10·90			(*b*) *Minus* 1·12 miles Correction due to actual measurement.
Kalyan to Vasind	1-10-54	(*e*) 17·28			
Vasind to Asangaon	6-2-60	3·75			
Asangaon to Kasara	1-1-61	21·84			
Kasara to Igatpuri (Thal Ghat)	1-1-65	9·89			
Igatpuri to Nasik	28-1-61	(*g*) 32·60			
Nasik to Chalisgaon	1-10-61	87·24			
Chalisgaon to Jalgaon	6-10-62	57·48			*Taken over from the E. I. Ry. on 1-10-25.
Jalgaon to Bhusaval	20-5-63	15·04			
Bhusaval to Burhanpur	20-11-65	33·73			
Burhanpur to Khandwa	3-9-66	42·78			
Khandwa to Bir	17-2-68	21·15			
Bir to Itarsi	1-1-70	89·27			†Kilokri Delhi handed over to N. W. Ry. on 1-3-26.
Itarsi to Sohagpur	1-2-70	(*b*) 29·57			
Sohagpur to Jubbulpore	8-3-70	**121·36			
*Jubbulpore to Naini and Cheoki	1-8-67	**222·83			
Raja-Ki-Mandi (Agra) to Kosi	3-12-04	(*h*) 56·29			
†Kosi to Kilokri (949·487 mile)	15-11-04	(*f*) 55·27			
			950·26		(*c*) *Plus* 0·38 mile Correction due to actual remeasurement.
Branches—					
Itarsi-Nagpur branch—					
Itarsi to Betul	1-5-13	(*c*) 66·39			
Betul to Amla	29-9-14	14·31			
Amla to Parasia	1-11-15	54·10			
Nagpur to Katol	15-1-23	**38·04			**Actual Remeasurement.
Katol to Narkher	1-11-23	15·76			
Narkher to Amla	4-9-24	50·07			
			238·67		
Bombay Harbour branch—					
Buffer Stop—Mile. 0	25	0·19			
Victoria Terminus to Reay Road	4-2-25	2·54			(*d*) *Minus* 0·34 mile Correction due to actual remeasurement.
Reay Road station to Kurla	12-12-10	7·23			
			9·96		
Kurla-Chembur branch—					
Kurla to Chembur	4-2-24	1·24			
Chembur to Mandala	1-7-27	2·94			
			(*d*) 4·18		
Mahim chord—					
Ravali to Mahim	12-8-14	1·16			
			1·16		(*e*) *Plus* 1·36 miles Correction due to actual remeasurement.
Chalisgaon-Dhulia branch—					
Chalisgaon to Dhulia	15-10-00	34·95			
			34·95		
Jalgaon-Amalner branch—					
Jalgaon to Erandol Road	20-2-00	18·26			
Erandol Road to Amalner	4-4-00	16·00			
			34·26		
Nagpur branch—					
Bhusaval Junction to Malkapur	20-5-63	**30·08			(*f*) *Minus* 0·08 mile due to portion handed over to N. W. Railway.
Malkapur to Shegaon	24-10-64	32·53			
Shegaon to Badnera	18-12-65	72·67			
Badnera to Pulgaon	16-7-66	40·29			
Pulgaon to Sindi	5-11-66	38·27			
Sindi to Nagpur	20-2-67	29·36			
			243·20		
Khamgaon branch—					
Jalamb to Khamgaon	4-3-70	7·72			
			7·72		
Amraoti branch—					
Badnera to Amraoti	16-2-71	5·98			
			5·98		(*g*) *Plus* 0·52 mile due to diversion of mean mileage of Padeali and Laharit.
Balharshah branch—					
Wardha to mile 490·20	1-2-79	18·94			
Mile 490·20 to mile 512·64	24-12-75	22·44			
Mile 512·64 to Warora	26-4-76	4·00			
Warora to Balharshah	1-2-08	37·12			
			82·50		
Majri to Rajur	4-5 25	13·20			
			13·20		
Ghugus extension—					
Tadali to Ghugus	15-11-18	8·71			
			8·71		(*h*) *Minus* 1·03 miles due to removal of Muttra yard, B. B. and C. I. Railway.
Agra-Bah—					
Agra to Hatshamsabad	17-9-28	(*i*) 11·72			
			11·72		
Baran Kotah—					
Baran to Antah	20-2-07	13·58			
Antah to Kotah	1-5-09	26·71			
			40·29		(*i*) Correction due to Sec. Hatshamsabad to Bah being closed down from 1-1-39.
				———	
Carried over	..	..	..	1,686·76	

NOTE.—Mohpani Branch (Gadarwada to Gotitoria) (11·70 miles) removed and Kosi Kalan and Sanket Branch (15·95 Miles) closed on 1st April 1927 and materials removed in 1931.

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*a*) Great Indian Peninsula railway (5′ 6″ gauge)—*contd.*

Progress in opening—contd.

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Brought forward .	..	..	..	1,686·76	
Cawnpore-Banda—					
Juhi to Hamirpur Road . . .	21-4-13	32·92			
Hamirpur Road to Khirada	20-7-14	43·16			
			76·08		
South-East line—					(*a*) *Plus* 0·73 mile Correction due to actual measurement. (*b*) *Minus* 0·21 mile Correction due to Bhore Ghat realignment. †Realignment over Cognee river.
Main line—					
Kalyan to Palasdhari (Karjat) . . .	12-5-56	(*a*) 31·33			
Palasdhari to Khandala (Bhore Ghat) . .	14-5-63	(*b*) 12·99			
Khandala to Poona	14-6-58	43·64			
Poona to Diksal	15-12-58	64·25			
Diksal to Kurduvadi Junction . . .	23-10-59	50·60			
Kurduvadi Junction to Mohol . . .	21-1-60	28·32			
Mohol to Sholapur	6-6-60	20·51			
Sholapur to Gulbarga	1-2-70	70·29			
Gulbarga to Krishna	1-12-70	† 73·32			
Krishna to Raichur	1-5-71	13·12			
			408·37		
Branches—					
Manmad branch—					
Dhond to Ahmednagar	15-3-78	50·41			
Ahmednagar to Manmad	17-4-78	‡94·08			
			144·49		
Khopoli branch—					
Palasdhari to Khopoli	12-5-56	7·25			
			7·25		
				636·19	
Total open mileage, Great Indian Peninsula Railway Proper—				2,322·95	
Midland section—					
Main line (including the Scindia State railway)—					
Bhopal to Jhansi	1-1-89	179·62			
Jhansi to Gwalior	1-3-89	60·10			
Gwalior to Hetampur*	20-12-79	32·40			*Scindia State railway.
Hetampur to Dholpur*	5-5-81	8·04			
Dholpur to Agra Cantonment*	10-1-78	‡ 36·76			‡Actual measurement.
Junction with Agra-Delhi Chord railway at Agra to terminal point of Belanganj Goods Depot.	27-2-06	2·46			
Centre of Agra Cantonment (mile 834·21) to junction point with Bombay, Baroda and Central India Railway near Idgah (Agra) (mile 835·56).	1-3-05	0·98			
Agra Bayana Spur line	1-2-32	0·38			(*c*) *Plus* 0·35 mile taken over from E. I. Rly. on 7-1-32.
			320·74		
Branches—					
Manikpur branch—					
Jhansi to Mau Ranipur	5-6-89	39·90			
Mau Ranipur to Banda	1-8-89	78·96			
Banda to Manikpur	15-2-89	‡61·30			
			180·16		
Cawnpore branch—					
Jhansi to Chaunrah	1-2-88	94·78			
Chaunrah to Juhi	1-4-86	(*d*) 37·84			(*d*) *Minus* 0·55 mile Correction due to the portion handed over to E. I. Rly. on 6th February 1931.
			132·62		
North quarry	26-7-07	2·78			
			2·78		
Bina to point of junction with Bina-Goona-Baran railway.	1-4-95	2·00			
			2·00		
Bina-Saugor-Katni branch—					
Bina to Saugor	5-6-89	45·25			
Saugor to Damoh	26-3-98	47·83			
Damoh to Katni	1-1-99	‡69·84			
Katni Murwara to junction with Bengal-Nagpur railway.	1-1-90	0·71			
Katni Murwara to junction with East Indian railway.	1-1-99	0·44			
			164·07		
Agra area	..	..			
Junction near east mouth of tunnel (mile 837·53) to East Indian railway down point of Agra City (mile 837·57).	3-2-13	0·04			
East Indian railway down point of Agra City (mile 837·57) to junction with East Indian railway (mile 837·60).	3-2-13	0·03			
			0·07		
Ait to Kunch	7-12-03	‡8·49	‡8·49		
Total open mileage, Midland section .	..	..	..	810·93	
Total open mileage, Great Indian Peninsula Railway	..	..	..	3,133·88	

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*a*) Great Indian Peninsula railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
QUADRUPLE LINE—					
Buffer Stop—Mile 0	28	0·19			
Victoria Terminus to Cursy Road	4-12-05	4·29			
Curry Road to Thana	4-12-15	16·97			
Thana to Kalyan	17-3-16	1·59			
	1-3-17	*9·70			
			32·74	32·74	*Minus* 0·65 mile Correction due to actual measurement.
TOTAL QUADRUPLE LINE	..	..	..		
DOUBLE LINE—					
NORTH-EAST LINE—					
Main line—					
Kalyan to Vasind	22-10-66	17·29			
Vasind to Atgaon	20-2-67	9·65			
Atgaon to Kasara	25-4-67	15·94			
Kasara to Igatpuri	1-1-65	9·89			
Igatpuri to Kajgaon	10-1-69	(*a*) 128·99			(*a*) *Plus* 0·52 mile due to diversion of mean mileage of Padali and Laharit section.
Kajgaon to Pachora	17-3-69	16·05			
Pachora to Maheji	27-5-69	9·14			
Maheji to Bhadli	6-3-73	27·59			
Bhadli to Bhusaval	6-6-73	7·84			
Bhusaval to Bhusaval Junction	1-7-92	0·80			
Bhusaval Junction to Khandwa (Abna Junction)	11-1-89	74·52			
Khandwa to Itarsi	16-10-05	110·48			
			428·18		
Bombay Harbour branch—					
Buffer Stop to Mile 0	..	0·19			
Victoria Terminus to Reay Road	4-2-25	2·58			
Reay Road Station to Kurla	2-12-10	7·17			
			9·94		
Mahim chord—					
Ravali to Mahim	12-8-14	1·16			
			1·16		
Kalyan to Palasdhari	12-5-56	†31·33			† *Plus* 0·73 mile Correction due to actual measurement.
Palasdhari to Khandala } Bhore Ghat	14-5-63	‡12·99			
Khandala to Lonavla } Bhore Ghat	14-6-58	2·35			
Lonavla to Malavli	29-5-07	4·92			
Malavli to Talegaon	8-1-08	13·51			
Talegaon to Shelarvadi	22-5-08	6·02			
Shelarvadi to Poona	13-5-08	16·13			
			87·25		‡*Minus* 0·21 mile Correction due to Bhore Ghat realignment.
Nagpur branch—					
Bhusaval Junction to Bodwad	11-1-89	§17·60			§Due to actual re-measurement.
Bodwad to Shegaon	1-4-90	44·85			
Shegaon to Murtajapur	30-3-15	46·49			
Murtajapur to Badnera	9-11-15	25·50			
Badnera to Dhamangaon	25-1-17	28·76			
Dhamangaon to Dahegaon	1-5-17	22·24			
Dahegaon to mile 465½	12-3-18	3·11			
Mile 465½ to mile 475½	30-8-18	10·12			
Mile 475½ to Sindi	21-12-21	15·14			
Sindi to mile 514½	6-5-22	23·08			
Mile 514½ to Nagpur	19-12-18	1·70			
	19-1-22	4·84			
			243·46		
Midland section—					
Agra Cantonment to new Junction with Agra-Delhi Chord railway near Raja-ki-Mandi.	3-2-13	2·70			
Old Junction with Agra-Delhi Chord railway near Raja-ki-Mandi (mile 836·58) to terminal point of Belanganj Goods Depot (mile 838·07).	3-2-13	2·13			
Junction near east mouth of tunnel (mile 837·53) to East Indian railway down point of Agra City (mile 837·57).	3-2-13	0·04			
Junction point near Raja-Ki-Mandi to Centre of Bilochpura Station.	3-2-13	0·66			
			5·53		
TOTAL DOUBLE LINE	..	..	..	775·52	

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*a*) Great Indian Peninsula Railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent Way :—

	Down Miles.	Up Miles.
North East Line (Bombay to Delhi). The line is laid with the following Permanent-way :—		
100 lbs. B. H. rails on wooden & C. I. Pot sleepers	363	340
90 lbs. F. F. rails on troughs and C. I. plates	443	160
85 lbs. B. H. rails on wooden and C. I. Pot sleepers	108	..
82 lbs. B. H. rails on C. I. Pot sleepers	72	..
South East Line (Kalyan to Raichur). The line is laid with the following Permanent-way :—		
115 lbs. F. F rails on wooden sleepers	2	2
100 lbs. B. H. rails on wooden and C. I. pot sleepers	84¼	83¾
90 lbs. F. F. rails on troughs	156	1¼
82 lbs. B. H rails on C. I. Pot sleepers	145¼	¼
Bhusawal to Nagpur.—The line is laid with the following Permanent-way :—		
100 lbs. B. H. rails on C. I. Pot sleepers	6¼	185¼
82 lbs. B. H. rails on C. I. Pot sleepers	228¾	58
90 lbs. F. F. rails on C. I. plates	8	..
Itarsi to Allahabad .—The line is laid with the followig Permanent-way :—		
100 lbs. F. F. (Old section) rails on Wooden and C. I. Plates	..	77¼
100 lbs. D. H. (E. I. R.) rails on D. O. plates	..	46¾
90 lbs. F. F. (E. I. R.) rails on troughs	..	226¼
88½ lbs. B. H. (E. I. R.) rails on Wooden and D. O. Plates	..	24¼

Branches—

(i) The following branches are laid with 100 lbs. B. H. rails on wooden sleepers :—

(1) Harbour Branch.
(2) Mahim Chord.

(ii) The following branches are laid with 82 lbs. B. H. rails on C. I. Pot sleepers :—

(1) Dhond-Manmad.
(2) Jalamb-Khamgaon.
(3) Badnera-Amraoti.
(4) Wardha-Ballarshah.
(5) Majri-Rajur.
(6) Amla-Parasia.
(7) Itarsi-Nagpur except between Amla and Narkhed which is 90 lbs. F. F. rails on troughs.

(iii) The following branches are laid with 80 lbs. F. F. (I. M. R.) rails on wooden, C. I. pots and trough sleepers :—

(1) Bina-Katni.
(2) Jhansi-Manikpur.
(3) Jhansi-Cawnpore except for 25 miles on 82 lbs. B. H. rails on C. I. pots.

(iv) The following branches are laid with 75 lbs. F. F. (I. S. R.) rails on wooden and trough sleepers :—

(1) Bhopal-Ujjain.
(2) Cawnpore-Banda.
(3) Bina to Kotah except Baran Kotah which is 87 lbs. on wooden sleepers.

(v) Ait-Kunch is laid with 75 lbs. D. H. rails on D. O. plates for about 4 miles and the remaining 4¼ miles with 62 lbs. F. F. (S. S. R.) rails on steel troughs.

(vi) The following branches are laid with 69 lbs. D. H. rails on C. I. pot sleepers :—

(1) Kurla-Mankhurd.
(2) Karjat-Khopoli.
(3) Chalisgaon-Dhulia.
(4) Jalgaon-Amalner.
(5) Tadali-Ghugus.
(6) Agra-Bah.

Ballast.—The line is ballasted with broken stone, sand, gravel, laterite, kunkur and moorum but on Cawnpore-Banda Section brick ballast has been provided in few station yards.

Fencing.—The whole of the G. I. P. railway proper is fully fenced with the exception of the branches which are partially fenced.

Curves.—On main line the sharpest curve has a radius of 857 feet on the Thull Ghat between miles 78·00 and 79·00.

On branches the sharpest curve has a radius of 600 feet on Kurla Mankhurd Railway between miles 0·00 to 1·00.

Gradients.—On the Great Indian Peninsula railway proper the ruling gradients on ordinary sections of the main line vary from 1 in 100 to 1 in 200, with 1 in 100 banking sections near Vasind and Asvali the ruling gradient on the Ghat sections is 1 in 37 and on Harbour branch (electrified) 1 in 34. On the Midland section the ruling gradient between Bhopal and Jhansi is 1 in 200; between Jhansi and Agra 1 in 150 and between Jhansi and Manikpur 1 in 125. The Jhansi-Cawnpore branch is practically level, except at Jumna bridge approaches where the gradient is 1 in 250 and between Jhansi and Garhman where it is 1 in 200. On Baran Kotah the ruling gradient is 1 in 150 and between Cawnpore-Banda it is 1 in 150.

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*a*) Great Indian Peninsula Railway (5′ 6″ gauge)—*concld.*

Details of construction—*concld.*

Contracts—

Nil. All the contracts between the Secretary of State and the railway company were determined on the 30th June 1925 and the line was brought under di ect State management with effect from the 1st July 1925.

Rates and fares.—Certain maxima and minima have been fixed by the Government, between the limit of which the Railway Administration can vary the rates and fares quoted for goods and coaching traffic.

Statistics of working (Those for the periods prior to 1901 will be found in Appendix 38 to the Railway Administration Report fo 1907)—

NOTE.—The amount of sterling liabilities involved in the purchase of railways included in the figures shown in column 3 below against 1933-34 and 1934-35 has been converted at the rates of exchange ruling at the time when the liabilities came into being as against the statutory rate of exchange *i. e., 1s. 6d.* previously adopted. From the year 1935-36 onwards, the same amount has been reconverted at the latter rate.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay, or capital at charge given in column (5).	Interest.	Annuity and Sinking Fund.	Company's share of surplus profits (based on terms of contract) *attributable to each Year.*	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	
1901 .	1,548·27	30,64,49,134	4,16,57,458	2,16,48,151	7·06	48,96,916	1,90,87,970	1,97,661‡	—25,34,396	518	48·09
1902 .	1,561·63	30,83,53,092	4,24,25,217	2,10,98,968	6·84	49,58,679	1,90,56,785	2,64,702	—31,81,198	523	50·18
1903 .	1,561·63	31,08,53,055	4,68,61,534	2,38,12,514	7·66	50,67,701	1,90,28,730	3,79,633	—6,63,550	575	49·18
1904 .	1,561·63	32,00,72,108	4,82,41,344	2,41,79,728	7·55	53,19,948	1,90,28,595	3,84,935	—5,53,750	592	49·80
1905 .	1,561·63	32,65,20,022	5,22,33,877	2,70,20,162	8·28	57,50,859	1,90,28,535	5,28,413	+17,12,355	641	48·27
1906 .	1,561·63	33,57,64,972	5,05,23,479	2,53,01,900	7·54	61,23,516	1,90,28,535	4,46,777	—2,96,928	623	49·92
1907 .	1,561·63	35,22,04,887	5,28,77,202	2,49,15,559	7·07	61,14,699	1,90,28,340	4,28,268	—6,55,748	649	52·88
1908 .	1,599·41	37,36,87,900	4,68,32,792	1,76,86,213	4·73	58,53,220	1,90,28,340	64,298	—82,59,645	563	62·24
1909 .	1,599·53	37,28,51,484	5,27,26,707	2,23,43,894	6·08	72,63,545	1,90,28,340	..	—39,47,991	634	57·64
1910 .	1,606·24	38,67,82,534	5,88,44,731	2,58,06,771	6·67	74,48,102	1,90,28,355	4,60,763	—11,30,449	705	56·14
1911 .	2,420·40	52,81,05,122	7,21,04,393	3,21,75,319	6·09	1,32,37,381	1,90,21,899	2,11,031	—2,94,992	573	55·38
1912 .	2,419·33	54,83,41,956	8,02,98,465	3,69,34,275	6·74	1,33,36,641	1,90,27,104	6,30,327	+39,40,208	638	54·00
1st qr. of 1913.	2,418·41	55,97,86,072	2,35,95,346	1,07,43,557	1·92	34,21,681	47,56,635	3,08,487	+22,56,754	751	54·47
1913-14 .	2,484·03	59,49,23,530	8,57,95,516	3,40,52,063	5·72	1,49,18,233	1,90,28,043	4,01,512	—2,95,725	664	60·31
1914-15 .	2,499·64	62,57,62,657	7,71,55,244	2,86,15,825	4·57	1,35,09,055	1,90,27,710	63,799	—39,84,739	593	62·91
1915-16 .	2,554·35	65,18,54,816	9,04,19,770	3,87,73,463	4·95	1,71,15,055	1,90,27,710	5,20,228	+21,10,470	681	57·12
1916-17 .	2,551·71	65,77,23,985	9,74,13,433	4,50,10,038	6·84	1,70,48,950	1,90,27,680	7,94,697	+81,38,711	734	53·75
1917-18 .	2,553·13	66,55,45,487	10,61,08,431	4,94,99,571	7·44	1,76,88,694	1,90,27,665	10,02,459	+1,17,80,753	799	53·33
1918-19 .	2,561·84	67,23,21,109	11,89,14,999	5,06,22,902	7·52	1,79,21,600	1,90,27,665	10,41,379	+1,26,32,258	893	57·43
1919-20 .	2 561·62	68,90,15,460	12,63,46,982	4,70,91,731	6·83	1,89,79,710	1,90,27,650	8,65,548	+82,18,823	949	62·73
1920-21 .	2,561·62	†86,98,43,000	12,81,81,819	2,91,33,269	3·35	1,73,82,782	1,47,37,969	..	—29,87,482	962	77·27
1921-22 .	2,561·46	†90,18,93,349	12,74,19,698	1,01,18,484	1·12	2,16,31,266	1,95,62,946	..	—3,10,75,780	957	92·86
1922-23 .	2,604·28	†91,49,97,994	13,96,47,756	3,45,90,066	3·78	2,22,94,990	1,90,94,081	..	—67,99,005	1,031	75·23
1923-24 .	2,615·55	†97,10,58,868	13,83,18,665	4,53,52,608	4·67	2,31,42,899	1,83,14,625	4,45,895	+38,95,079	1,017	67·21
1924-25 .	2,672·35	†97,97,37,495	14,56,93,994	5,80,69,038	5·93	3,16,75,442	(*c*)	‖10,54,388	+2,53,39,208	1,048	60·14
1925-26 .	2,904·50	††1,04,09,07,703	14,09,17,901	3,87,74,608	3·73	(*b*)3,40,47,471	..	‖1,99,986	(*b*)+45,27,151	933	72·48
1926-27¶	3,139·31	†1,09,69,26,121	14,61,48,930	4,24,31,091	3·87	(*b*)3,64,62,804	..	..	(*b*)+59,68,287	895	70·97
1927-28 .	(*a*)3,145·66	†1,18,41,98,230	15,15,14,616	5,34,01,198	4·71	3,89,01,941	..	..	+1,44,99,257	926	64·75
1928-29 .	(*a*)3,167·97	†1,16,98,22,552	15,44,02,489	5,27,50,829	4·51	4,16,66,394	..	..	+1,10,84,435	937	65·68
1929-30 .	(*a*)3,190·11	1,14,92 92,484	14,34,51,876	4,19,69,528	3·65	4,28,84,242	..	..	—9,14,714	865	70·74
1930-31 .	(*a*)3,181·14	1,10,59,53,443	13,16,07,516	2,93,28,340	2·52	4,57,32,391	..	..	—1,64,04,051	795	77·72
1931-32(*d*)	3,206·59	1,17,24,48,688	11,68,08,145	2,09,38,790	2·30	4,60,64,734	..	..	—1,91,25,944	701	76·94
1932-33(*d*)	3,208·33	1,16,52,13,753	11,96,47,489	2,84,54,460	2·44	4,55,38,411	..	..	—1,70,83,951	717	75·22
1933-34(*d*)	3,208·56	1,21,07,33,941	12,23,01,710	3,23,40,303	2·67	4,49,80,846	..	..	—1,26,40,543	733	73·48
1934-35(*d*)	3,208·56	1,20,65,66,698	12,13,57,821	3,29,87,388	2·73	4,37,28,763	..	..	—1,07,41,375	727	72·82
1935-36(*d*)	3,208·43	1,14,38,04,381	12,54,02,824	3,68,48,047	3·22	4,26,54,777	..	..	—68,06,780	752	70·64
1936-37 .	3,165·63	1,13,60,28,550	13,07,81,912	4,69,91,484	4·13	4,14,77,096	..		+55,14,388	794	64·06
1937-38 .	3,165·63	1,13,78,01,348	12,80,80,634	4,20,17,345	3·69	4,13,26,629	..	..	+6,90,716	778	67·19
1938-39 .	3,133·88	1,13,25,08,348	12,74,55,399	4,07,50,602	3·60	4,10,61,369	..	..	—3,10,767	782	68·03

†Including premia paid by Government in the purchase of the line.

‡From 1st July 1900 to 31st December 1901.

§The capital at charge of Rs. 3,96,10,000 to end of March 1925 of the Naini-Jubbulpore section of the E. I. Ry. has been transferred to the G. I. P. Ry. without financial adjustment. The cost of Survey of the Agra-Bah railway, viz., Rs. 44,245-15-6 at end of March 1925 has also been brought on the G. I. P. Ry. books from those of the N. W. Railway.

‖ For quarter ending 30th June 1925.

¶ Includes Agra-Delhi chord, Baran-Kotah and Cawnpore-Banda railways.

(*a*) Includes mileage of Central Salsette Tramway.

(*b*) Revised figures.

(*c*) The capital account was permanently debited with the balance of capital liability outstanding on 31st March 1924 in respect of the purchase of the railway under redemption by annuities and sinking fund on which full interest is charged in column 7.

(*d*) Includes Dharwa Pusad Railway (2′ 6″ gauge section).

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*b*) Bhopal-Itarsi railway (5′ 6″ gauge)—

Progress in opening :-

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Itarsi to Hoshangabad	1-6-82	10·76		
Hoshangabad to Bhopal	1-11-84	45·00		
			55·76	
Branch—				
Centre of Bhopal station to the joint boundary of the Bhopal-Itarsi and Indian Midland railways at Bhopal.	11-11-95	0·88		
			0·88	
TOTAL .	..	..	..	56·64

Details of construction—

Permanent-way.—The line is laid with 90-R lb. F. F. rails on troughs from Itarsi to Hoshangabad and Barkhera to Bhopal and Hoshangabad to Barkhera with 100-lb. B. H. rails on C. I. pot sleepers except two small stretches of 90-R lbs. F F. rails on Narbudha and Godaria bridges.

Ballast.—The line is fully ballasted throughout with broken stone.

Fencing.—The line is fenced throughout.

Curves.—There are no curves with a radius of less than 1,080 feet.

Gradients.—The ruling gradient is 1 in 200, except on the Ghat section, 11 miles, where it is 1 in 80.

Agreements and contract—

On the termination of the contract with the late Great Indian Peninsula Railway Company, the line was brought under direct State management with effect from the 1st July 1925, the Secretary of State having the authority to maintain and work the line either by the Agency of a railway company or the State under the terms of the following contracts :—

Agreement, dated the 16th September 1880, *between the Government of India and Her Highness the Begum of Bhopal*, as to the construction, management, maintenance and working, by the Government, of the Bhopal-Itarsi railway.

Agreement, dated the 30th June 1887, *between the Government of India and Her Highness the Begum of Bhopal*, supplemental to, and modifying, the agreement of 1880.

Agreement, dated the 2nd December 1890, *between the Government of India and Her Highness the Begum of Bhopal*, supplemental to, and further modifying, the agreement of 1880

Contract, dated the 21st December 1900 (called the principal contract), *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance, management and working, by the Company of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

(i) *Land.*—Land within the Bhopal State was provided free of cost by the Durbar ; that within British territory by the Government at the cost of capital.

(ii) *Government aid.*—The Government paid for the portion of the line in British territory, and a moiety of the cost of the bridge over the Nerbudda river ; in all about Rupees 13,00,000 ; the Begum of Bhopal contributed Rupees 50,00,000 for the portion of the line in her dominions.

All additional capital is to be provided by the Government, which undertook to construct, maintain, manage and work the line by State or other agency. The line was managed, maintained, stocked and worked by the Great Indian Peninsula Railway Company up to the 30th June 1925 as part of Company's undertaking and the line was brought under direct state management on the termination of the contract with the Company with effect from 1st July 1925.

(iii) *Terms of working.*—For working and stocking the Bhopal-Itarsi railway the Great Indian Peninsula Railway Administration receives a sum which bears the same proportion to the total working expenses of the undertaking, including the Bhopal-Itarsi railway, as the gross earnings of the Bhopal-Itarsi railway bear to the gross earnings of the undertaking.

(iv) *Distribution of profits.*—The net earnings are divided in perpetuity between the Government and the Ruler of Bhopal in proportion to the capital contributed by each. In the event of the railway being worked at a loss, such loss is borne by the two parties in the same proportion.

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*b*) **Bhopal-Itarsi railway** (5′ 6″ gauge)—*concld.*

Agreements and contract—*concld.*

(v) *Rates and fares.*—

(vi) *Special obligations as to the conveyance of*—

(*a*) Mails, troops, police, high Government officials and Government stores—

(*b*) Government bullion and coin, and the persons in charge thereof—

} as on the Great Indian Peninsula Railway.

(vii) *Power of the Government to determine contract*—

(viii) *Power of the Bhopal Durbar to determine contract*—

(ix) *Term of contract*—

} *Nil.*

Statistics of working (Those for the periods prior to 1889 will be found in Appendix 38 to the Railway Administration report for 1907).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.		Gross earnings.		Net earnings.		Percentage of net earnings on total capital outlay given in columns (3) and (4).		Interest on Government capital.	Gain or loss to Government *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
		Contributed by the Bhopal Durbar.	Contributed by Government.	Attributable to the Durbar.	Attributable to Government.	Attributable to the Durbar.	Attributable to Government.	On capital contributed by the Durbar.	On capital contributed by Government.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Miles	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	
1889 .	57·11	48,40,846	12,50,000	2,67,936	79,163	—18,351	—5,422	..	..	50,000	—55,422	117	106·86
1890 .	57·11	50,00,000	12,85,077	2,97,049	87,765	—56,093	—16,572	..	..	50,351	—66,923	129	118·62
1891 .	57·11	50,00,000	15,13,568	4,60,431	1,30,884	1,73,154	48,607	3·46	3·21	57,713	—9,106	199	60·52
1892 .	57·11	50,00,000	17,46,208	4,47,797	1,53,099	1,65,883	56,397	3·32	3·23	69,131	—12,734	202	63·02
1893 .	57·11	50,00,000	20,25,058	4,24,236	1,69,162	1,30,925	52,038	2·62	2·57	73,429	—26,391	200	69·17
1894 .	57·11	50,00,000	21,71,496	3,80,217	1,61,638	1,44,607	61,455	2·89	2·83	85,509	—22,054	182	60·19
1895 .	57·39	50,00,000	22,47,963	3,18,074	1,42,658	1,02,821	46,114	2·06	2·05	89,323	—43,200	154	67·67
1896 .	57·39	50,00,000	22,71,877	3,61,363	1,63,688	1,38,532	62,744	2·77	2·76	90,107	—27,363	176	61·66
1897 .	57·39	50,00,000	22,97,134	3,31,379	1,52,215	1,33,096	61,135	2·66	2·66	91,805	—30,670	162	59·84
1898 .	57·39	50,00,000	23,24,365	4,17,010	1,93,364	1,71,375	79,435	3·43	3·42	92,477	—18,042	204	58·20
1899 .	57·39	50,00,000	23,61,938	4,47,225	2,09,611	1,79,444	84,080	3·59	3·56	93,303	—9,223	228	59·88
1900 .	57·39	50,00,000	23,87,339	5,35,369	2,55,120	2,67,288	1,27,332	5·35	5.33	95,293	—32,039	265	50·08
1901 .	57·39	50,00,000	25,46,891	5,85,152	2,92,861	2,88.838	1,44,235	5·78	5·66	98,889	+45,246	294	
1902 .	57·39	50,00,000	28,02,330	6,37,038	3,46,103	3,16,683	1,71,236	6·33	6·11	1,06,632	+64,604	329	50·37
1903 .	57·39	50,00,000	30,92,697	6,31,911	3,77,177	3,21,328	1,91,441	6·43	6·19	1,17,285	+74,156	338	49·18
1904 .	57·39	50,00,000	31,52,907	6,43,742	3,95,734	3,22,374	1,98,066	6·45	6·28	1,20,127	+77,939	348	49·98
1905 .	57·39	50,00 000	31,76,934	5,21,619	3,25,637	2,67,959	1,67,305	5·36	5·27	1,23,241	+44,064	284	48·62
1906 .	57·39	50,00,000	32,57,841	5,66,833	3,60,294	2,81,376	1,78,761	5·63	5·49	1,25,079	+53,682	311	53·09
1907 .	57·39	50,00,000	33,98,742	7,32,284	4,83,589	3,44,438	2,27,071	6·88	6·68	1,04,145	—1,22,962	407	53·60
1908 .	57·39	50,00,000	35,34,132	6,11,033	4,29,276	2,31,222	1,62,302	4·62	4·59	1,19,624	+42,678	349	62·17
1909 .	57·39	50,00,000	36,27,495	6,50,553	4,68,717	2,75,516	1,98,456	5·51	5·47	1,20,102	+78,354	375	57·65
1910 .	57·39	50,00,000	37,52,643	7,66,302	5,70,169	3,33,339	2,47,995	6·68	6·61	1,23,711	+1,24,284	448	56·46
1911 .	56·62	50,00,000	38,28,934	7,34,374	5,58,428	3,29,072	2,50,159	6·58	6·53	1,28,262	+1,85,518	439	55·19
1912 .	56·62	50,00,000	39,14,773	9,09,768	7,09,010	4,08,687	3,18,267	8·17	8·13	1,32,749	+1,31,897	550	55·09
1st qr. of 1913	56·62	50,00,000	39,41,321	2,69,528	2,12,459	1,22,889	96,869	2·46	2·46	33,398	+63,471	655	54·41
1913-14 .	56·62	50,00,000	40,23,467	8,82,535	7,05,991	3,48,636	2,78,970	6·97	6·93	1,38,967	+1,40,003	539	60·46
1914-15 .	56·62	50,00,000	40,69,706	6,62,101	5,38,468	2,48,000	2,01,763	4·96	4·96	1,41,598	+60,165	408	62·53
1915-16 .	56·62	50,00,000	40,84,392	8,06,984	6,58,689	3,43,352	2,80,302	6·87	6·86	1,41,576	+1,38,726	498	57·45
1916-17 .	56·37	50,00,000	40,94,554	9,62,624	7,87,907	4,46,266	3,65,281	8·93	8·92	1,34,805	+2,30,476	597	53·62
1917-18 .	57·22	50,00,000	40,96,197	12,15,053	9,94,950	5,68,227	4,65,293	11·36	11·36	1,42,215	+3,23,078	743	53·23
1918-19 .	57·22	50,00,000	41,30,905	13,55,183	11,16,515	5,81,939	4,79,385	11·64	11·60	1,43,208	+3,36,177	830	57·06
1919-20 .	57·22	50,00,000	41,55,174	13,27,672	11,00,907	4,95,335	4,10,816	9·91	9·89	1,42,403	+2,68,413	816	62·69
1920-21 .	57·22	50,00,000	44,10,784	14,46,757	12,76,267	3,33,146	2,93,887	6·66	6·66	1,45,946	+1,47,941	915	76·97
1921-22 .	57·22	50,00,000	44,84,439	13,45,723	12,06,962	1,15,081	1,03,215	2·30	2·30	1,57,702	—54,487	858	91·45
1922-23 .	57·22	50,00,000	45,32,148	14,31,219	12,97,300	3,59,256	3,25,642	7·19	7·19	1,58,825	+1,66,817	917	74·90
1923-24 .	57·22	50,00,000	45,76,578	14,67,943	13,43,631	4,32,348	4,14,501	9·65	9·65	1,62,315	+2,79,186	945	67·14
1924-25 .	57·22	50,00,000	46,27,300	15,75,076	14,58,383	6,27,282	5,80,587	12·55	12·55	1,64,275	+4,16,312	1,019	60·19
1925-26 .	56·77	50,00,000	48,47,930	12,64,131	12,25,684	3,48,686	3,38,082	6·97	6·97	1,72,563	+1,65,519	84	72·42
1926-27 .	56·77	50,00,000	48,98,842	13,36,794	13,09,749	4,36,106	4,27,282	8·72	8·72	1,78,443	+2,48,839	897	67·38
1927-28 .	56·64	50,00,000	50,99,523	15,70,562	16,01,824	4,38,589	4,47,319	8·77	8·77	1,84,821	+2,62,498	1,077	72·07
1928-29 .	56·64	50,00,000	54,95,730	10,81,396	11,88,613	3,45,928	3,80,226	6·92	6·92	2,03,885	+1,76,341	771	68·01
1929-30 .	56·64	50,00,000	55,21,118	10,17,866	11,23,951	3,54,988	3,91,986	7·10	7·10	2,11,220	+1,80,757	727	65·12
1930-31 .	56·64	50,00,000	66,02,188	8,42,183	11,12,051	2,37,801	3,14,001	4·76	4·76	2,48,277	+65,724	663	71·76
1931-32 .	56·64	50,00,000	63,44,906	9,16,397	11,62,890	2,89,460	3,67,319	5·79	5·79	2,70,565	+96,754	706	68·41
1932-33 .	56·64	50,00,000	65,36,371	(*a*)9,64,275	(*a*)13,45,424	(*a*)3,27,749	(*a*)4,61,898	6·55	7·07	2,66,125	+1,95,773	172	65·81
1933-34 .	56·64	50,00,000	65,54,390	9,91,290	12,99,461	3,30,949	4,33,835	6·62	6·62	2,69,232	+1,64,603	778	66·61
1934-35 .	56·64	50,00,000	65,45,331	10,25,961	13,43,051	3,54,400	4,63,933	7·09	7·09	†2,63,828	+2,00,105†	804	65·46
1935-36 .	56·64	50,00,000	64,97,078	10,90,555	14,17,085	4,06,704	5,28,479	8·13	8·13	2,58,698	+2,69,781	847	62·71
1936-37 .	56·64	50,00,000	65,71,680	12,07,134	16,92,784	5,27,681	7,28,637	10·55	11·09	2,53,996	+4,74,641	982	56·68
1937-38 .	56·64	50,00,000	65,51,181	11,91,763	15,61,492	5,09,111	6,67,056	10·18	10·18	2,53,575	+4,13,481	932	57·28
1938-39 .	56·64	50 00,000	65,00,622	11,75,804	15,28,041	4,55,865	5,92,680	9·12	9·12	2,50,425	+3,42,255	915	61·21

(*a*) Represent the figures for 13 months, i.e., from March 1932 to March 1933, *vide* letter No. B. 2 R. 4—25, dated the 15th June 1933, from the Chief Accounts Officer, G. I. P. Railway.

† Revised figures.

(*c*) Bhopal-Ujjain railway (5′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bhopal to Ujjain	11-11-95	113·46	113·46

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*c*) Bhopal-Ujjain railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails on transverse steel sleepers.

Ballast.—The line is fully ballasted throughout with broken stone.

Fencing.—The line is fenced only at, and in the vicinity of stations, towns and important level crossings.

Curves.—There are no curves with a radius of less than 2,865 feet.

Gradients.—The ruling gradient is 1 in 150.

Agreements and contract—

On the termination of the contract with the late Great Indian Peninsula Railway Company the line was brought under direct State management with effect from the 1st July 1925, the Secretary of State having the authority to maintain and work the line either by the Agency of a railway company or the State under the terms of the following contracts :—

Agreement, dated the 4th August 1896 (called the principal contract), *between the Government of Her Highness the Begum of Bhopal and the Indian Midland Railway Company*, as to the maintenance, management and working, by the Company, of the Bhopal-Parbati section of the Bhopal-Ujjain railway as part of the Company's undertaking.

Agreement, dated the 4th August 1896 (called the principal contract), *between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company*, as to the maintenance, management and working, by the Company, of the Parbati-Ujjain section of the Bhopal-Ujjain railway as part of the Company's undertaking.

Corrigendum to the Agreement dated the 4th August 1896 as to compiling accounts and statistics annually instead of half-yearly, but the net earnings will be paid to His Highness' Government every half-year.

Contract, dated the 21st December 1900, *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance, management and working, by the Company, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

Memorandum No. 2653-I. B., dated the 1st July 1902, *from the Government of India in the Foreign Department, to the Government of India in the Public Works Department*, intimating the acceptance by Her Highness the Begum of Bhopal of the provisions of clauses 28 and 29 of the contract of the 21st December 1900, *between the Secretary of State and the Great Indian Peninsula Railway Company*, in lieu of those of clause 15 of the agreement of the 4th August 1896, *between Her Highness' Government and the Indian Midland Railway Company*, as to the method of arriving at the working expenses of the Bhopal-Parbati section of the Bhopal-Ujjain railway.

Agreement, dated the 31st January 1911 (supplemental to the agreement of 1896), *between the Secretary of State and the Government of Her Highness the Begum of Bhopal*, as to the substitution of "Secretary of State," for "Indian Midland Railway Company," as a party to the agreement of 1896.

Agreement, dated the 20th March 1911 (supplemental to the agreement of 1896), *between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior*, as to the substitution of "Secretary of State," for "Indian Midland Railway Company," as a party to the agreement of 1896.

Main provisions of agreements and contract—

(i) *Land.*—Provided free of cost by the Bhopal and Gwalior Durbars for the portions of the railway in their respective territories.

(ii) *Government aid.*—The Bhopal-Parbati section is owned by the Bhopal Durbar, and the Parbati-Ujjain section by the Gwalior Durbar, each of which provides the funds for additional works, alterations in existing works not of the nature of repairs, and expenses other than those due to ordinary wear and tear incidental to the use and working of the railway and works and the conveyance of traffic thereon. The line was managed, maintained, stocked and worked by the Great Indian Peninsula Railway Company up to 30th June 1925 as part of the Indian Midland Railway system of the Company's undertaking and the line was brought under direct State management on the termination of the contracts with the Company with effect from 1st July 1925.

(iii) *Terms of working.*—For the Bhopal-Parbati section the charges for working are represented by a sum which bears the same proportion to the whole of the working expenses attributed to the Indian Midland Railway section including branches, as the gross receipts of the section of the Bhopal Parbati section bear to the whole gross receipts of the Indian Midland railway section including branches.

For working the Parbati-Ujjain section the Great Indian Peninsula railway retains 50 per cent. of its gross receipts for each half-year. The gross earnings of the section are also charged with rent for the use of the station and accommodation provided by the Bombay, Baroda

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(c) Bhopal-Ujjain Railway (5′ 6″ gauge)—*concld.*

Main provisions of agreements and contract—*concld.*

and Central India railway at Ujjain Junction station, and with rent for the telegraph lines and instruments when not the property of the section.

(iv) *Distribution of profits.*—The net earnings of the Bhopal-Parbati section belong to the Bhopal Durbar; and those of the Parbati-Ujjain section, to the Gwalior Durbar.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of*—
(*a*) Mails, troops, police, high Government officials and Government stores—
(*b*) Government bullion and coin, and the persons in charge thereof—
} as on the Great Indian Peninsula railway.

(vii) *Power of the Government to determine agreements and contract*—
(viii) *Powers of the Durbars to determine agreements*—
} The agreements are terminable, on the expiry of ten years from the dates of opening of the respective sections throughout for all kinds of public traffic, on 12 months' notice in writing given by either party to the other on the 30th June or 31st December in any year.

(ix) *Term of agreements and contract.*—Ten years, from the date of opening of the respective section throughout for all kinds of public traffic.

Statistics of working (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings. †	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	113·27	78,82,524	11,10,645	5,12,648	6·50	189	53·84
1914-15	113·27	78,79,430	9,76,407	4,27,881	5·43	166	56·18
1915-16	113·27	78,82,465	10,77,534	5,04,090	6·39	183	53·22
1916-17	113·35	78,87,205	12,49,263	6,01,113	7·62	212	51·88
1917-18	113·28	79,00,130	8,92,619	4,26,889	5·40	152	52·17
1918-19	113·28	79,08,478	14,89,595	7,01,233	8·86	253	52·92
1919-20	113·28	79,19,385	17,30,002	7,86,132	9·93	294	54·56
1920-21	113·28	79,32,577	13,20,505	5,45,712	6·88	224	58·67
1921-22	113·28	79,41,406	15,30,203	5,74,552	7·23	260	62·45
1922-23	113·28	79,45,639	16,37,731	6,92,878	8·72	278	57·69
1923-24	113·28	79,49,712	14,62,373	6,48,075	8·15	248	55·68
1924-25	113·28	79,62,413	17,22,088	*8,00,702	10·60	292	53·51
1925-26	113·28	79,65,593	18,53,284	8,05,893	10·12	315	56·52
1926-27	113·28	79,74,718	14,95,134	6,70,823	8·41	253	55·13
1927-28	113·29	79,94,656	18,16,079	7,92,685	9·92	308	56·35
1928-29	113·29	80,27,618	18,47,854	8,15,723	10·16	314	55·86
1929-30	113·29	80,89,704	21,89,096	9,96,383	12·32	372	54·48
1930-31	113·28	81,36,828	19,25,994	8,40,447	10·33	327	56·36
1931-32	113·28	81,72,139	18,33,328	8,14,845	9·97	311	55·55
1932-33	113·28	82,03,438	(*a*)20,35,774	(*a*)9,14,957	11·15	346	55·06
1933-34	113·46	82,08,237	23,60,379	10,62,747	12·94	400	54·98
1934-35	113·46	82,07,930	22,85,198	10,33,911	12·60	387	54·76
1935-36	113·46	82,06,612	25,07,202	11,52,876	14·05	425	54·02
1936-37	113·46	82,05,842	26,81,473	12,75,444	15·54	454	52·43
1937-38	113·46	82,08,757	27,97,864	13,28,800	16·19	474	52·51
1938-39	113·46	82,09,451	28,27,286	13,09,496	15·95	479	53·68

(*a*) Represent the figures for 13 months, *i.e.*, from March 1932 to March 1933, *vide* Chief Accounts Officer, G. I. P. Railway's letter No. B. 2/R. 4-25, dated the 15th June 1933.

* Revised figures.

† Represents net earnings after deducting the direct charge against Bhopal-Ujjain Railway for rent of Ujjain Railway station and Government Telegraph instruments.

(d) Bina-Goona-Baran railway (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening	Miles.	Total.
1	2	3	4
From a point 32 D at mile 606·457 at Bina to junction with Bina-Goona-Baran railway at mile 607·916.	..	1·46	
From the joint boundary of the Midland section of the Great Indian Peninsula and Bina-Goona-Baran railways, a point 2·00 miles from the centre of Bina station to Goona.	23-9-95	71·71	
From centre of Goona station (mile 216—3,402 feet) to end of Baran station (mile 290—2,850 feet).	15-5-99	73·90	
TOTAL .	..	..	147·07

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*a*) Bina-Goona-Baran railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The line is laid with 75-lb. flat-footed steel rails, for about 109·54 miles on troughs and 36 miles on wooden sleepers, except 1·46 miles of 80 lbs. rails with C. I. pot sleepers.

Ballast.—The line is ballasted with broken stone and laterite.

Fencing.—The line from Bina to Goona is fenced. The Goona-Baran section is unfenced except at stations.

Curves.—There are no curves with a radius of less than 1,910 feet.

Gradients.—The ruling gradient is 1 in 25.

Agreements and contract—

On the termination of the contracts with the late Great Indian Peninsula Railway Company, the line was brought under the direct State management with effect from the 1st July 1925, the Secretary of State having the authority to maintain and work the line either by the Agency of a railway company or the State under the terms of the following contracts :—

Agreement, dated the 15th July 1896 (called the principal contract), *between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company,* as to the maintenance, management and working, by the Company, of the Bina-Goona section of the Bina-Goona-Baran railway as part of the Company's undertaking (with clause 13 thereof modified as to *maintenance of telegraphs* under the authority of the letter *from the Government of India to the Honourable the Agent to the Governor General for Central India,* No. 596-R.T., dated the 20th June 1899).

Corrigendum to the Agreement, dated the 15th July 1896, as to compiling accounts and statistics annually instead of half-yearly, but net earnings will be paid to His Highness' Government every half-year.

Agreement, dated the 20th February 1899 (called the principal contract), *between the Government of His Highness the Maharao of Kotah and the Indian Midland Railway Company,* as to the maintenance, management and working, by the Company, of the Chabra-Baran section of the Bina-Goona-Baran railway as part of the Company's undertaking.

Agreement, dated the 27th February 1899 (called the principal contract), *between the Government of His Highness the Nawab of Tonk and the Indian Midland Railway Company,* as to the management, maintenance and working, by the Company, of the Dharnaoda-Chabra section of the Bina-Goona-Baran railway as part of the Company's undertaking.

Agreement, dated the 12th May 1899 (called the principal contract), *between the Government of His Highness the Maharaja Scindia of Gwalior and the Indian Midland Railway Company,* as to the maintenance, management and working, by the Company, of the Goona-Dharnaoda section of the Bina-Goona-Baran railway as part of the Company's undertaking.

Contract, dated the 21st December 1900, *between the Secretary of State and the Great Indian Peninsula Railway Company,* as to the maintenance, management and working, by the Company, of the railways known as the Great Indian Peninsula railway system and the Indian Midland railway system, and the subsidiary lines included therein.

Memorandum No. 3529-I.B., dated the 20th September 1901, *from the Government of India in the Foreign Department, to the Government of India in the Public Works Department,* intimating the acceptance by the Kotah and Tonk Durbars of the provisions of clauses 28 and 29 of the contract of the 21st December 1900, *between the Secretary of State and the Great Indian Peninsula Railway Company,* in lieu of those of the contracts of the 20th and 27th February 1899, *between the Kotah and Tonk Durbars and the Indian Midland Railway Company,* as to the method of arriving at the working expenses, respectively, of the Chabra-Baran and Dharnaoda-Chabra sections of the Bina-Goona-Baran railway.

Agreements, dated the 16th March, 17th April and 29th June 1905, *between the Government of His Highness the Maharaja Scindia of Gwalior and the Government of His Highness the Nawab of Tonk,* as to the purchase, by the former from the latter, of the Dharnaoda-Chabra section of the Bina-Goona-Baran railway.

Agreement, dated the 12th January 1911, *between the Secretary of State and the Government of His Highness the Maharao of Kotah,* supplemental to the agreement of the 20th February 1899, *between the Kotah Durbar and the Indian Midland Railway Company,* as to the substitution of " Secretary of State," for " Indian Midland Railway Company," as a party to the agreement of 1899.

Agreement, dated the 20th March 1911, *between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior,* supplemental to the agreement of the 15th July 1896, *between the Gwalior Durbar and the Indian Midland Railway Company,* as to the substitution of " Secretary of State," for " Indian Midland Railway Company," as a party to the agreement of July 1896.

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*d*) Bina-Goona-Baran railway (5′ 6″ gauge)—*contd.*

Agreements and contract—*concld.*

Agreement, dated the 20th March 1911, *between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior*, supplemental to the agreement of the 12th May 1899, *between the Gwalior Durbar and the Indian Midland Railway Company*, as to the substitution of " Secretary of State," for " Indian Midland Railway Company," as a party to the agreement of 1899.

Agreement, dated the 20th March 1911, *between the Secretary of State and the Government of His Highness the Maharaja Scindia of Gwalior*, supplemental to the agreement of the 27th February 1899, *between the Tonk Durbar and the Indian Midland Railway Company*, as to the substitution of " Secretary of State," for " Indian Midland Railway Company," as a party to the agreement of 1899.

Memorandum No. 3002-I.B., dated the 30th August 1913, *from the Government of India in the Foreign Department, to the Government of India in the Railway Department, intimating* the acceptance by the Gwalior Durbar of the arrangement come to between the Tonk Durbar and the Great Indian Peninsula Railway Company in 1901, for the purpose of arriving at the working expenses of the Dharnaoda-Chabra section of the Bina-Goona-Baran railway.

Corrigendum to the agreement of 20th February 1899, as to the method of calculating the working expenses of the Chabra-Baran section with effect from 1st October 1917.

Main provisions of agreements and contract—

(i) *Land.*—Provided free of cost by the several Indian States for the portions of the railway in their respective territories.

(ii) *Government aid.*—The Bina-Goona, Goona-Dharnaoda, and Dharnaoda-Chabra sections are owned by the Gwalior Durbar, and the Chabra-Baran section by the Kotah Durbar, each of which provides funds for additional works, alterations in existing works not of the nature of repairs, and expenses other than those due to ordinary wear and tear and incidental to the use and working of the railway and works and the conveyance of traffic thereon. The railway was managed, maintained, stocked and worked by the late Great Indian Peninsula Railway Company as part of the Company's undertaking up to the 30th June 1925 and on termination of the contract the line was brought under direct State management with effect from the 1st July 1925.

(iii) *Terms of working.*—For working the Bina-Goona section, the Great Indian Peninsula Railway retains 50 per cent. of its gross receipts for each half-year. The gross receipts of the section are also charged with rent for works, etc., in sole and joint use at Bina junction as laid down in clause 10 of the agreement of the 15th July 1896, and with rent for telegraph lines and instruments when not the property of the railway.

For working the Goona-Dharnaoda section, the Great Indian Peninsula Railway retains out of its gross receipts a sum which bears the same proportion to the entire gross receipts of the section as the aggregate working expenses of the undertaking as a whole (including the Goona-Dharnaoda section) bear to the gross receipts of that system, for each half-year, subject to a limit of 50 per cent. of the gross earnings of the section.

For the Dharnaoda-Chabra section the Railway charges the same percentage of the entire gross receipts of that section as the aggregate working expenses of the whole system of the Railway bear to the gross receipts of that system.

For working the Chabra-Baran section the Great Indian Peninsula Railway retains out of its gross receipts a sum which bears the same proportion to the entire gross receipts of the section as the aggregate working expenses of the whole system of the Railway bear to the gross receipts of that system, for each half-year, subject to a limit of 50 per cent. of the gross earnings of the section. The said sum will not include rent on the capital cost of telegraph lines and instruments provided by the Government Telegraph Department.

(iv) *Distribution of profits.*—The net receipts of each section are paid over to the Durbar to which such section belongs.

(v) *Rates and fares.*—

(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores—
(*b*) Government bullion and coin, and the persons in charge thereof—
} as noted under Great Indian Peninsula Railway.

(vii) *Power of the Government to determine agreements*—
(viii) *Power of the Durbars to determine agreements*—
(ix) *Term of agreements*—
} as noted under Bhopal-Ujjain railway, except in the case of Chabra-Baran section where the Agreement, dated the 20th February 1899, is terminable on the 31st March or 30th September in any year on 12 months' notice being given in writing by either party to the other.

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

d) Bina-Goona-Baran railway (5′ 6″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)

Year. 1	Mileage open at end of each year. 2	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines opens, and (*ii*) lines partly or wholly under construction. 3	Gross earnings. 4	Net earnings. † 5	Percentage of net earnings on total capital outlay given in column (3.) 6	Earnings per mile per week. 7	Proportion of expenses to earnings. 8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	145·61	1,00,42,700	6,43,716	2,85,378	2·84	81	53·50
1914-15	145·61	1,00,50,037	4,46,962	1,92,056	1·91	59	57·03
1915-16	145·61	1,00,52,443	5,71,654	2,51,780	2·50	72	53·52
1916-17	145·61	1,00,53,452	5,66,179	2,72,316	2·71	76	52·74
1917-18	147·07	1,00,53,795	4,02,319	2,20,979	2·20	60	52·20
1918-19	147·07	1,00,68,646	5,21,700	2,39,133	2·37	66	52·34
1919-20	147·07	1,00,91,525	5,96,505	2,48,193	2·46	69	52·86
1920-21	147·07	1,00,93,799	4,26,735	2,25,316	2·23	65	54·64
1921-22	147·07	1,01,16,048	5,04,001	2,30,251	2·28	69	56·06
1922-23	147·07	1,01,07,879	77,01,404	3,23,574	3·20	92	53·87
1923-24	147·07	1,00,95,013	5,63,229	2,64,867	2·62	74	52·97
1924-25	147·07	1,01,78,086	8,26,106	*3,95,632	3·88	108	52·11
1925-26	147·07	1,01,86,121	6,84,413	3,16,202	3·10	89	53·80
1926-27	147·07	1,01,80,883	5,95,869	2,77,672	2·73	78	53·40
1927-28	147 07	1,02,10,985	6,02,489	2,78,312	2·72	79	53·81
1928-29	147·07	1,02,14,229	7,03,273	3,28,962	3·22	92	53·22
1929-30	147·07	1,02,17,875	5,99,496	2,81,077	2·75	78	53·11
1930-31	147·07	1,02,17,177	5,53,788	2,55,242	2·50	72	53·91
1931-32	147·07	1,02,09,229	6,98,052	3,26,338	3·20	91	53·25
1932-33	147·07	1,02,09,025	(*a*)7,44,092	(*a*)3,50,676	3·43	97	52·87
1933-34	147·07	1,02,16,117	6,79,557	3,18,144	3·11	89	53·18
1934-35	147·07	1,02,16,117	7,25,958	3,41,466	3·34	95	52·96
1935-36	147·07	1,02,16,745	6,65,992	3,15,244	3·09	87	52·67
1936-37	147·07	1,02,14,588	9,20,263	4,45,226	4·36	120	51·62
1937-38	147·07	1,02,14,588	9,47,490	4,57,620	4·48	124	51·70
1938-39	147·07	1,02,14,588	9,46,709	4,51,586	4·42	124	52·30

* Revised figures.

(*a*) Represent the figures for 13 months, *i.e.*, from March 1932 to March 1933, *vide* Chief Accounts Officer, G. I. P. Railway's letter No. B. 2 R. 4-25, dated the 15th June 1933.

† Represent net earnings after deducting the direct charge against the Bina-Baran Railway for interest on works at Bina and rent of Government Telegraph instruments.

(*e*) Darwa Pusad Railway (2′ 6″ gauge).—

Progress in opening.

Section of railway. 1	Date of opening 2	Miles. 3	Total. 4
Darwa to Pusad	15-12-31	42·80	42·80

Details of construction—

Permanent-way.—The permanent-way consists of second hand 80 lbs. F. F. rails on wooden sleepers.

Ballast.—The line is ballasted with broken stone in cutting and moorum in banks.

Fencing.—Only the station yards and A Class level crossings are fenced.

Curves—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 100 compensated.

Contracts—

It is a State line worked by the State.

Statistics of working—[Those for the period 1931-32 to 1935-36 are included under G. I. P. Railway (5′-6″ gauge)].

Year. 1	Mileage open at end of each year. 2	Total Capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction. 3	Gross earnings. 4	Net earnings. 5	Percentage of net earnings on total capital outlay, or capital at charge given in column (3). 6	Interest. 7	Gain (+)or loss (—) to the State *pertaining to each year.* 8	Earnings per mile per week. 9	Proportion of expenses to earnings. 10
1936-37	42·80	(*a*)31,76,057	96,132	—13,070	—0·41	1,53,404	—1,66,474	43	113·59
1937-38	42·80	31,76,181	93,042	—8,622	—0·27	1,51,186	—1,59,808	42	109·27
1938-39	42·80	31,76,181	114,145	+14,741	+0·46	1,40,280	—1,34,539	51	87·09

(*a*) Repayments construction outlay only. Expenditure from 1934-35 is merged in the G. I. P. Railway expenditure.

(*f*) Dhond-Baramati railway (2′ 6″ gauge)—

Agents—MESSRS. SHAPOORJI GODBOLE & Co., BOMBAY.

Date of registration of the Company—1912.

Progress in opening—

Section of railway. 1	Date of opening. 2	Miles. 3	Total. 4
Dhond to Baramati	20-5-14	27·30	27·30

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*f*) Dhond-Baramati railway (2′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails laid on pressed steel pea-pod sleepers.

Ballast.—The line is ballasted with stone and the banks with moorum.

Fencing.—Only the station yards are fenced.

Curves.—The sharpest curve is of 478·3 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Contracts—

On the termination of the contracts with the late Great Indian Peninsula Railway Company the line was brought under direct State management with effect from the 1st July 1925, the Secretary of State having the authority to maintain and work the line either by the Agency of a railway company or the State under the terms of the following contracts:—

Dated the 15th January 1919, *between the Secretary of State and the Dhond-Baramati Railway Company* as to the construction and working of the Dhond-Baramati railway.

Corrigendum to the Agreement, dated the 15th January 1919, as to compiling accounts and statistics annually instead of half-yearly. An *ad interim* payment of 90 per cent. of the approximate amount of net earnings being paid every half-year to the Agent of Dhond-Baramati railway.

Dated the 5th February 1920, *between the Secretary of State and the Great Indian Peninsula Railway Company,* as to the working and maintenance of the line.

Main provisions of contracts—

(i) *Land.*—Land in British territory provided free of cost.

(ii) *Government aid.*—The Government shall allow to the Company at the end of each year by way of rebate such a sum not exceeding in any year the net earnings of the Great Indian Peninsula railway from all traffic (except stores for maintenance or working) interchanged between the Great Indian Peninsula railway and the Dhond-Baramati railway as shall, together with the net earnings of the Company for the said year, make up an amount equal to interest for such year at a rate of 5 per cent. per annum on the actual expenditure charged in the capital account. When the net earnings do not suffice to pay interest more than at the rate of 5 per cent. per annum for the year, the Company shall be paid by the working agency out of the working expenses the sum of Rs. 6,000 on account of office expenses and expenses of management and direction of the Company and also such legal expenses as may be incurred by the Company and approved by Government and as are debitable to Revenue. When the net earnings exceed 5 per cent. on the capital expenditure and if such excess is insufficient to meet the office expenses and expenses of management up to the limit of Rs. 6,000, the balance will be paid to the Company by the working agency out of the working expenses.

(iii) *Terms of working.*—The line is supplied with plant and machinery, other than fixed machinery, and is managed, worked and maintained in respect of the railway, station yards, sidings, rolling stock, etc., for 45 per cent. of its gross earnings.

(iv) *Distribution of profits.*—When the net earnings of the Company exceed the minimum amount sufficient to pay interest at the rate of 5 per cent. per annum such excess shall be applied for or towards the payment of office expenses and expenses of management and direction of the Company during the year up to a limit of Rs. 6,000 and the balance, if any, shall be divided equally between Government and the Company. The Government share is payable to the Great Indian Peninsula Railway.

(v) *Rates and fares.*—As under the Great Indian Peninsula Railway.

(vi) *Special obligations as to the conveyance of —*

(*a*) Mails, troops, police, high Government officials and Government stores—

(*b*) Government bullion and coin, and the persons in charge thereof—

} All business connected with the management of the line and conducting the traffic thereon, including police and telegraphs and telegraphic appliances, shall in all respect, as far as practicable, be carried on in the same manner and subject to the same regulations and control by the Secretary of State as the like business on the Great Indian Peninsula railway.

(vii) *Power of the Government to determine contract.*—The Government may, by giving not less than twelve months' "notice of purchase" determine the contract either on the 30th September 1944 or on the 30th September in the last year of any subsequent period of ten years.

If the contract is determined by 'notice of purchase,' the Government shall pay to the Company 25 times the amount of the average of the yearly net earnings (excluding payments on account of rebate) derived by the Company during three years immediately preceding the time at which the contract shall be determined, subject to a limit of 20 per cent. in excess of, but not less than, the total capital expenditure of the Company.

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7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*f*) Dhond-Baramati railway (2′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

The Government may also, by giving twelve months' "notice of special purchase," determine the contract at any time in the following cases :—

(*a*) when it is considered desirable that the gauge of the railway should be altered;

(*b*) when it is considered desirable to convert the railway into a line of through communication ; and

(*c*) when it is considered desirable to extend the railway (without altering the gauge or making the line part of a through route), and the Company is unable or unwilling to supply the necessary capital for such extension.

If the contract be determined by ' notice of special purchase ' the Government to pay to the Company 25 times the average of the yearly net earnings (excluding payments on account of rebate) of the Company during the last preceding three years, or 115 per cent. of the total capital expenditure of the Company, whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract [if not determined under (vii)].*—None specified

Statistics of working—

Year.	Mileage open at end of each year	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from (+), or share of surplus profits payable to (—), the Great Indian Peninsula railway.	Total income.	Percentage of total income on total capital outlay given in column. (3)	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1914-15	27·26	11,81,373	50,233	27,628	2·34	+12,448	40,076	3·39	35	45·00
1915-16	27·26	11,61,931	68,289	37,559	3·23	+20,948	58,507	5·03	48	45·00
1916-17	27.26	11,60,314	78,246	43,035	3·71	+14,507	57,542	4·96	55	45·00
1917-18	27·26	11,62,368	95,049	52,277	4·50	—5,841	58,118	5·00	67	45·00
1918-19	27·26	11,74,064	1,25,062	68,784	5·85	—2,040	66,744	5·68	88	45·00
1919-20	27·26	11,77,330	2,07,897	1,14,343	9·71	—24,738	89,605	7·61	147	45·00
1920-21	27·26	11,79,354	1,36,848	75,266	6·39	—5,149	70,117	5·95	97	45·00
1921-22	27·26	11,79,354	1,59,660	87,813	7·45	—11,423	76,390	6·48	113	45·00
1922-23	27·26	11,79,354	1,92,567	1,05,912	8·98	—20,472	85,440	7·24	136	45·00
1923-24	27·26	11,79,354	1,87,919	1,03,355	8·76	—18,608	84,747	7·18	132	45·00
1924-25	27·26	11,79,706	1,81,995	1,00,097	8·48	—16,685	83,412	7·07	128	45·00
1925-26	27·26	11,80,639	1,86,314	1,02,473	8·68	—17,907	84,566	7·16	131	45·00
1926-27	27·26	12,28,568	2,03,188	1,11,753	9·10	—21,436	90,317	7·35	143	45·00
1927-28	27·26	12,30,729	1,87,304	1,03,017	8·37	—16,942	86,075	6·99	132	45·00
1928-29	27·26	12,40,225	1,85,684	1,02,126	8·23	—17,058	85,068	6·86	131	45·00
1929-30	27·26	12,40,096	1,73,842	95,613	7·71	—13,804	81,809	6·60	123	45·00
1930-31	27·26	12,55,476	1,60,211	88,116	7·20	—9,671	78,445,	6·25	113	45·00
1931-32	27·26	12,59,564	1,30,344	71,689	5·69	—1,355	70,334	5·58	92	45·00
1932-33	27·26	12,59,564	1,14,072	62,740	4·98	+6,238	68,978	5·48	80	45·00
1933-34	27·30	12,59,564	1,22,559	67,407	5·35	+1,571	68,978	5·48	86	45·00
1934-35	27·30	12,59,564	1,00,285	55,157	4·38	+13,821	68,978	5·48	71	45·00
1935-36	27·30	12,59,564	1,21,187	66,653	5·29	+2,325	68,978	5·48	85	45·00
1936-37	27·30	12,59,421	1,17,778	64,778	5·14	+4,200	68,978	5·48	83	45·00
1937-38	27·30	12,59,564	96,148	52,881	4·20	+16,097	68,978	5·48	68	45·00
1938-39	27·30	12,56,613	92,704	50,987	4·06	+17,843	68,830	5·48	65	45·00

(*g*) Ellichpur-Yeotmal railway (2′ 6″ gauge)—

Agents.—MESSRS. KILLICK, NIXON & CO., BOMBAY.

Date of registration of the Company.—1910.

This line was constructed by the late Great Indian Peninsula Railway Company for a Branch Line Company called the Central Provinces Railways Company.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Ellichpur to Murtajapur	1-12-13	47·81	
Murtajapur to Karanja	1-11-14	19·82	
Karanja to Yeotmal	30-9-15	50·18	
TOTAL OPEN MILEAGE	..	..	117·81

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*g*) Ellichpur-Yeotmal railway (2′ 6″ gauge)—*contd.*

Details of construction.—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails laid on pressed steel peapod sleepers.

Ballast.—The line is chiefly ballasted with broken stone and sand. Banks at places are ballasted with moorum.

Fencing.—Only the station yards are fenced.

Curves.—The sharpest curve is of 4·78 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Contract—

On the termination of the contracts with the late Great Indian Peninsula Railway Company the line was brought under direct State management with effect from the 1st July 1925, the Secretary of State having the authority to maintain and work the line either by the Agency of a railway company or the State under the terms of the following contracts :—

Dated the 27th March 1916, *between the Secretary of State and the Central Provinces Railways Company*, as to the construction, maintenance and working of the Ellichpur-Yeotmal railway.

Corrigendum to the Agreement, dated the 27th March 1916, as to compiling accounts and statistics annually instead of half-yearly. An *ad interim* payment of 90 per cent. of approximate amount of net earnings being paid every half year to the Agents, Ellichpur-Yeotmal railway.

Dated the 15th December 1916, *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance and working of the Ellichpur-Yeotmal railway.

Dated the 3rd October 1917 (supplemental to the contract of 27th March 1916), *between the Secretary of State and the Central Provinces Railways Company*, as to the construction and working of the Pulgaon-Arvi railway as part of, and included in, the original undertaking.

Dated the 2nd August 1918 (supplemental to the contract of 15th December 1916), *between the Secretary of State and the Great Indian Peninsula Railway Company*, as to the maintenance and working of the Pulgaon-Arvi railway.

Main provisions of contracts—

(i) *Land.*—Land in British territory provided free of cost.

(ii) *Government aid.*—The Government shall allow to the Company at the end of each year by way of rebate such a sum, not exceeding in any year the net earnings of the Great Indian Peninsula railway, from all traffic, originating or terminating at stations of this railway, as shall together with the net earnings of the Company make up an amount equal to interest for the year at a rate of 5 per cent. per annum on the paid up share capital of the Company. When the net earnings do not suffice to pay interest at 5 per cent., the Company shall be paid by the working agency out of the working expenses the sum of Rs. 15,000 for each year towards the office expenses and expenses of management and direction of the Company and also pay all such legal expenses as shall have been incurred by the Company and are debitable to Revenue. When the net earnings excluding rebate exceed the interest at 5 per cent., such excess, if less than Rs. 15,000 *plus* the amount of legal expenses, shall be applied towards the office expenses and expenses of management and direction and the legal expenses and the balance to make up the sum of Rs. 15,000 and the legal expenses shall be paid by the working agency out of the working expenses

(iii) *Terms of working.*—The line is supplied with plant and machinery, other than fixed machinery, and is managed, worked and maintained in respect of the railway station yards, sidings, rolling-stock, etc., for 45 per cent. of its gross earnings.

(iv) *Distribution of profits.*—When the net earnings of the Company exceed the minimum amount sufficient to give a return of 5 per cent. per annum such excess shall be applied towards the payment of office expenses, expenses of management and direction of the Company up to a limit of Rs. 21,000 and the balance, if any, shall be divided equally between Government and the Company. The Government share is payable to the Great Indian Peninsula Railway.

(v) *Rates and fares.*—As under the Great Indian Peninsula Railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores—
(*b*) Government bullion and coin, and the persons in charge thereof—

} All business connected with the management and maintenance of the line and conducting the traffic thereon, including police and telegraphs and telegraphic appliances, shall in all respects, as far as practicable, be carried on in the same manner and subject to the same regulations and control by the Secretary of State as the like business on the Great Indian Peninsula railway.

(vii) *Power of the Government to determine contract.*—The Government may, by giving not less than twelve months' "notice of purchase", determine the contract on the 31st March 1947 or on the 31st March in the last year of any subsequent period of ten years.

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*g*) Ellichpur-Yeotmal railway (2′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

If the contract is determined by "notice of purchase," the Government shall pay to the Company 25 times the amount of the average yearly net earnings (excluding payments on account of rebate) derived by the Company during the three years immediately preceding the time at which the contract shall be determined, subject to a limit of 20 per cent. in excess of, but not less than the total capital expenditure of the Company.

The Government may also, by giving twelve months' "notice of special purchase", determine the contract at any time in the following cases :—

(*a*) when it is considered desirable that the gauge of the railway should be altered ;

(*b*) when it is considered desirable to convert the railway into a line of through communication ; and

(*c*) when it is considered desirable to extend the railway (without altering the gauge or making the line part of a through route), and the Company is unable or unwilling to supply the necessary capital for such extension.

If the contract be determined by "notice of special purchase ', the Government to pay to the Company 25 times the average yearly net earnings (excluding payments on account of rebate) of the Company during the last preceding three years, or 115 per cent. of the total capital expenditure of the Company, whichever may be the greater.

(viii) *Power of the Company to surrender contracts.*—Nil.

(ix) *Term of contract* [*if not determined under* (*vii*)].—None specified.

Statistics of working (including Pulgaon-Arvi railway from 1917-18).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in Column (3).	Difference between Miscellaneous Receipts not credited to earnings and half share of interest charges on joint works not included in the percentage for working expense paid to the working Agency.	Rebate from (+), or share of surplus profits payable to (—), the Great Indian Peninsula railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	
1913-14	47·45	24,35,662	65,505	36,027	1·48	..	..	36,027	1·48	196	45·00
1914-15	67·48	32,43,618	2,86,101	1,57,356	2·52	..	..	1,57,356	2·52	82	45·00
1915-16	117·23	66,53,204	4,46,479	2,45,563	3·69	..	+4,402	2,49,965	3·76	73	45 00
1916-17	117·66	67,58,039	5,96,016	3,28,304	4·86	..	+16,590	3,44,894	5·10	98	44·00
1917-18	139·49	83,85,992	6,67,556	3,59,455	4·29	..	+32,115	3,91,570	4·67	92	*46 15
1918-19	139·49	84,02,787	9,11,563	5,05,648	6·02	..	—32,274	4,73,374	5·63	126	†44·53
1919-20	139·49	84,40,580	12,72,526	7,02,095	8·32	..	—1,29,428	5,72,667	6·78	175	‡44·83
1920-21	139·49	84,86,485	13,48,812	7,41,962	8·74	..	—1,49,370	5,92,592	6·98	186	45·00
1921-22	139·49	84,99,774	12,54,644	6,91,715	8·14	..	—1,23,389	5,68,326	6·69	173	45·00
1922-23	139·49	86,12,791	14,26,048	7,85,569	9·09	..	—1,52,127	6,33,442	7·33	197	44·91
1923 24	139·49	86,44,709	14,11,348	7,76,241	8·98	..	—1,44,085	6,32,156	7·31	195	45·00
1924-25	139·49	86,12,998	14,45,598	9,60,079	11·15	..	—2,35,863	7,24,216	8·41	241	45·00
1925-26	139·49	86,83,542	14,90,668	8,19,868	9·44	+1,697	—1,63,470	6,58,095	7·58	206	45·00
1926-27	139·49	88,61,181	12,87,332	7,08,033	7·99	+14,653	—1,01,380	6,21,306	7·01	177	45·00
1927-28	139·49	91,00,186	12,54,412	6,89,927	7·58	+18,041	—91,963	6,16,005	6·77	173	45·00
1928-29	139·64	91,29,844	13,65,861	7,51,224	8·23	+12,609	—1,36,417	6,27,416	6·87	188	45·00
1929-30	139·64	91,21,598	15,09,041	8,29,973	9·10	+11,204	—1,75,089	6,66,088	7·30	208	45·00
1930-31	139·64	91,49,995	12,32,389	6,77,814	7·41	+11,110	—98,962	5,89,962	6·45	170	45·00
1931-32	139·64	92,10,946	6,42,946	3,57,330	3·88	+10,013	+1,17,657	4,85,000	5·27	89	45·00
1932-33	139·64	92,86,461	7,71,921	4,24,557	4·57	+4,411	+56,121	4,85,089	5·22	106	45·00
1933-34	139·64	92,84,802	6,19,516	3,40,734	3·67	+3,527	+1,40,754	4,85,015	5·22	85	45·00
1934-35	139·64	93,57,788	5,99,433	3,29,688	3.52	+1,656	+1,53,683	4,85,027	5·18	83	45·00
1935-36	139 64	93,61,295	5,97,802	3,28,791	3·51	+532	+1,54,193	4,83,516	5·16	82	45·00
1936-37	139·64	93,71,859	5,85,515	3,22,033	3·44	+476	+1,61,085	4,83,594	5·16	81	45·00
1937-38	139·64	93,73,569	5,76,049	3,16,827	3·38	+300	+1,66,652	4,83,779	5·16	79	45·00
1938-39	139·64	93,67,904	5,87,827	3,23,305	3·45	+297	+1,60,815	4,84,417	5·17	81	45·00

* The increase of 1·15 per cent. is due to the hire of rolling-stock paid to the Pachora-Jamner railway.

† The decrease of 0·47 per cent. is due to the hire of rolling-stock received from the Pachora-Jamner railway.

‡ The decrease of 0·17 per cent. is due to the hire of rolling-stock received from the Pachora-Jamner railway

(*h*) Pachora-Jamner railway (2′ 6″ gauge)—

Agents.—MESSRS. SHAPOORJI GODBOLE & Co., BOMBAY.

Date of registration of the Company.—10th February 1915.

Sanction to the construction of this line by the late Great Indian Peninsula Railway Administration, for the Pachora-Jamner Railway Company, was conveyed in Railway Board's Notification No. 64, dated the 17th March 1915.

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*h*) Pachora-Jamner railway (2′ 6″ gauge)—*contd.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Pachora to Shendurni	1-4-18	17·59	
Shendurni to Phaur	21-10-18	7·03	
Phaur to Jamner	24-3-19	10·00	
TOTAL	..	..	34·62

Details of construction –

Permanent-way.—The permanent-way consists of second-hand 69-lbs. D. H. steel rails laid on second-hand cast iron pot sleepers.

Ballast.—The line is ballasted with moorum and sand.

Fencing.—Fencing has only been provided for 300 feet on each side of first class level crossings.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Contracts—

On the termination of the contracts with the late Great Indian Peninsula Railway Company the line was brought under direct State management with effect from the 1st July 1925, the Secretary of State having the authority to maintain and work the line either by the Agency of a railway company or the State under the terms of the following contracts :—

Dated the 22nd May 1919, *between the Secretary of State and the Pachora-Jamner Railway Company—*
Dated the 18th February 1921, *between the Secretary of State and the Great Indian Peninsula Railway Company—*
} As to the construction, maintenance and working of the Pachora-Jamner railway.

Corrigendum to the agreement, dated the 22nd May 1919, as to compiling accounts and statistics annually instead of half-yearly. An *ad interim* payment of 90 per cent. of the approximate amount of net earnings being paid every half-year to the Agents, Pachora-Jamner railway.

Main provisions of contracts.—

(i) *Land.*—Land in British territory provided free of cost.

(ii) *Government aid.*—The Government shall allow to the Company at the end of each year, by way of rebate, such a sum not exceeding in any year the net earnings of the Great Indian Peninsula Railway derived from all traffic interchanged between the Great Indian Peninsula Railway and the Pachora-Jamner Railway as shall, together with the net receipts of the Company for the said year, make up an amount equal to interest for such year at a rate of 5 per cent. per annum on the share capital of the Company for the time being paid up. When the net receipts of the Company do not suffice to pay interest at 5 per cent. the Company shall be paid by the working agency out of the working expenses the sum of Rs. 5,000 per annum on account of office expenses, and expenses of management and direction of the Company and also such legal expenses as may be incurred by the Company and approved by Government and as are debitable to Revenue. When the net receipts exceed 5 per cent. on the share capital, the office expenses and the expenses of management to the extent specified above shall be a first charge on surplus profits before they are divided between Government and Company, provided that if the surplus profits are insufficient to meet the administrative charges the balance will be paid to the Company by the working agency out of the stipulated percentage of the earnings of the railway received by it.

(iii) *Terms of working.*—The line is supplied with plant and machinery, other than fixed machinery, and is managed, worked, and maintained, in respect of the railway, station yards, sidings, rolling-stock, etc., for 45 per cent. of its gross earnings.

(iv) *Distribution of profits.*—When the net receipts of the Company in any year exceed the minimum amount sufficient to pay interest at 5 per cent. on the paid up share capital, such excess shall be applied for or towards payment of office expenses and expenses of management and direction of the Company up to the limit specified in provision (ii) above and the balance, if any, shall be divided equally between Government and the Company. The Government share is payable to the Great Indian Peninsula Railway.

(v) *Rates and Fares.*—As under the Great Indian Peninsula Railway.

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*contd.*

(*h*) **Pachora-Jamner railway** (2′ 6″ gauge)—*contd.*

Main provisions of contracts—*contd.*

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores —
(*b*) Government bullion and coin and the persons in charge thereof—

} All matters and things in connection with the management and maintenance of the railway and the conduct of traffic thereon, including police and telegraphs and telegraphic appliances or telephones shall in all respects, as far as practicable, be carried on in the same manner and subject to the same regulations and control by the Secretary of State as the same are carried on on the Great Indian Peninsula Railway and the Company shall not interfere or be concerned therewith.

(vii) *Power of the Government to determine contract.*—The Government may, by giving not less than twelve months' " notice of purchase ", determine the contract on the 31st March 1949 or on the 31st March in the last year of any subsequent period of ten years.

If the contract is determined by " notice of purchase " the Government shall pay to the Company a sum of money equal to 25 times the amount of the average of the yearly net earnings derived by the Company during the three years immediately preceding the date on which this contract shall be determined subject to the limit of 20 per cent. in excess of, but not less than the total capital expenditure of the Company.

The Government may also, by giving twelve months' " notice of special purchase ", determine the contract at any time in the following cases :—

(*a*) when the Secretary of State considers it desirable that the gauge of the railway should be altered,

(*b*) when it is desired to convert the railway into a line of through communication,

(*c*) when the Secretary of State desires to extend the Railway and the Company does not within six months from the date of the formal requisition by the Secretary of State for the capital necessary for the construction of extension, raise such additional capital.

If the contract be determined by " notice of special purchase " the Government to pay to the Company 25 times the average of the yearly net earnings derived by the Company during the three years preceding such date or 115 per cent. of the total capital expenditure of the Company, whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract [if not determined under (vii)].*—None specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Difference between Miscellaneous receipts not credited to earnings and half share of interest charges on joint works not included in the percentage for working expenses paid to the working Agency.	Rebate from (+), or share of surplus profits payable to (—), the Great Indian Peninsula Railway.	Total Income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.			Rs.	Rs.		Rs.	
1918-19	34·62	16,65,251	61,681	33,925	2·04	..	..	..	..	57	45·00
1919-20	34·62	16,39,841	1,63,010	88,096	5·37	..	+3,396	91,492	5·58	91	45·96*
1920-21	34·62	16,58,887	1,42,524	78,132	4·71	..	+13,400	91,532	5·52	79	45·18*
1921-22	34·62	16,65,906	1,51,837	79,820	4·79	..	+11,757	91,577	5·50	84	47·43*
1922-23	34·62	16,88,297	1,51,553	80,594	4·77	..	+11,596	92,190	5·46	84	46·82*
1923-24	34·62	16,88,298	1,57,442	86,593	5·13	..	+7,797	94,390	5·59	87	45·00
1924-25	34·62	16,97,048	2,02,678	1,11,473	6·57	..	— 6,764	1,04,709	6·17	113	45·00
1925-26	34·76	16,97,377	1,60,592	88,326	5·20	+3,748	+9,357	1,01,431	5·98	80	45·00
1926-27	34·76	17,85,610	1,41,180	77,649	4·35	+1,062	+22,972	1,01,683	5·69	78	45·00
1927-28	34·76	17,88,783	1,15,589	63,574	3·55	+842	+ 37,598	1,02,084	5·70	64	45·00
1928-29	34·76	17,83,459	1,02,101	56,156	3·15	+851	+42,445	99,452	5·58	56	45·00
1929-30	34·76	17,79,075	1,06,145	58,380	3·28	+519	+40,607	99,506	5·59	59	45·00
1930-31	34·76	17,82,585	79,602	43,781	2·46	+889	+54,888	99,558	5·58	44	45·00
1931-32	34·76	17,80,687	64,916	35,703	2·01	+446	+38,167	74,316	4·17	36	45·00
1932-33	34·76	17,81,135	87,043	47,874	2·69	+525	+50,905	99,304	5·58	48	45·00
1933-34	34·62	17,82,939	83,500	45,925	2·58	+323	+52,966	99,214	5·56	46	45·00
1934-35	34·62	17,83,312	69,138	38,026	2·13	+301	+55,755	94,082	5·28	38	45·00
1935-36	34·62	17,83,312	71,220	39,171	2·20	+401	+59,841	99,413	5·57	39	45·00
1936-37	34·62	17,81,706	63,309	34,820	1·95	+236	+42,910	77,966	4·38	35	45·00
1937-38	34.62	17,83,314	50,179	27,598	1·55	+347	+33,405	61,350	3·44	28	45·00
1938-39	34.62	17,83,314	49,451	27,198	1·53	—62	+28,213	55,349	3·10	27	45·00

*The increase is due to the hire of rolling-stock paid to the Central Provinces Railway.

7. GREAT INDIAN PENINSULA RAILWAY SYSTEM—*concld.*

(i) Pulgaon-Arvi railway (2′ 6″ gauge)—

Agents.—MESSRS. KILLICK, NIXON & Co., BOMBAY.

Date of registration of the Company.—1914.

Sanction to the construction of this line by the late Great Indian Peninsula Railway Company, for the Central Provinces Railways Company, was conveyed in Railway Board's Notification No. 248, dated the 30th September 1914.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Pulgaon to Arvi	25-9-17	21·83	21·83

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed rails on trough sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—Only station platforms, B class level crossings and some cuttings alongside the Public Works Department road are fenced.

Curves.—The sharpest curve is of 537 feet radius.

Gradients.—The steepest gradient is 1 in 80.

Contracts—

Main provisions of contracts— } Included in the particulars noted under Ellichpur-Yeotmal railway.

Statistics of working.—Included with Ellichpur-Yeotmal railway.

8. JODHPUR RAILWAY SYSTEM.

Lines comprised in the system.—The Jodhpur railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Jodhpur railway (3′ 3⅜″ gauge)	766·94	35·40	802·34
(*b*) Jodhpur-Hyderabad railway (British section) (3′ 3⅜″ gauge)	248·58	20·66	269·24
(*c*) Mirpur Khas-Khadro railway (3′ 3⅜″ gauge)	49·50	..	49·50
Total	1,065·02	56·06	1,121·08

(*a*) Jodhpur railway (3′ 3⅜″ gauge)—

The railway is the property of His Highness the Maharaja of Jodhpur.

Progress in opening:—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5	Remarks. 6
Main line—					
Kuchaman Road to Merta Road	13-3-93	73·00			
Merta Road to Jodhpur	8-4-91	64·00			
Jodhpur to Luni Junction	9-3-85	20·00			
Luni Junction to Balotra	22-3-87	50·51			
Balotra to Barmer	15-5-99	60·00			
Barmer to the Marwar Frontier	22-12-00	74·44			
			341·95		
Branches and extensions—					
Pachpadra branch—					
Balotra to Pachpadra	22-3-87	10·00			
			10·00		
Marwar Railway Junction extension—					
Luni Junction to Marwar Pali	17-6-84	25·00			
Marwar Pali to Marwar Railway Junction	24-6-82	19·00			
			44·00		
Phalodi branch—					
Jodhpur to Osian	21-9-13	34·28			
Osian to Marwar Lohawat	17-3-14	27·22			
Marwar Lohawat to Phalodi	12-5-14	17·69			
			79·19		
Merta City branch—					
Merta Road to Merta City	18-1-05	3·95			
			8·95		* Owing to realignment of the line Sanvrad Sujangarh *via* Ladnun, the Jaswantgarh-Ladnun branch was dismantled resulting in a net decrease of the line by 1·45 miles. The realignment was opened on 1st May 1932. †This line was originally on the 2′0″ gauge but was converted to and opened on the 3′3⅜″ gauge on the date shown.
Bhagu extension—					
Merta Road to Nagaur	16-10-91	35·00			
Nagaur to Marwar Frontier	9-12-91	24·50			
			59·50		
Marwar Frontier extension—					
*Degana to Marwar Frontier	16-9-09	64·22			
			64·22		
Sursagar Branch—					
Jodhpur to Sursagar stone siding	15-3-24	9·39			
			9·39		
Bilara Branch—					
†Pipar Road to Bilara	2-8-28	25·72			
			25·72		
Parbatsar Branch—					
Makrana to Parbatsar	1-8-28	13·21			
			13·21		
Raniwara Branch—					
Samdari to Mokalsar	1-2-29	16·23			
Mokalsar to Jalor	15-3-29	20·44			
Jalor to Marwar Bhinmal	1-5-30	38·75			
Marwar Bhinmal to Raniwara	1-3-31	19·81			
			95·23		
Phulad Branch—					
Marwar Junction to Phulad	4-2-36	15·58			
			15·58		
TOTAL OPEN MILEAGE	..	..	..	766·94	
Lines under construction or Sanctioned for construction—					
‡Phalodi to Pokaran	..	35·40	35·40	35·40	‡Sanctioned on 19-5-27.
				802·34	

Details of construction—

Permanent-way.—About 209 miles of the line are laid with 60-lbs. steel rails, 413 miles with 50-lbs., 30 miles with 41-¼ lbs. and 115 miles with 36 lbs. rails. The sleepers are steel trough, deodar, and sâl.

Ballast.—The whole of the main line and a considerable portion of the branch line are ballasted with stone and marble and the balance with coarse sand and Kankar.

Fencing.—With the exception of a few stations the line is unfenced.

Curves.—The sharpest curve is of 716 feet radius.

Gradients.—The ruling gradient is 1 in 120 except at mile 8 on the Sursagar quarry branch where the steepest gradient is 1 in 50.

JODHPUR RAILWAY SYSTEM.

REFERENCES.

Jodhpur Railway ..... 3'-3 3/8"

State lines .....

Private Companies' lines .....

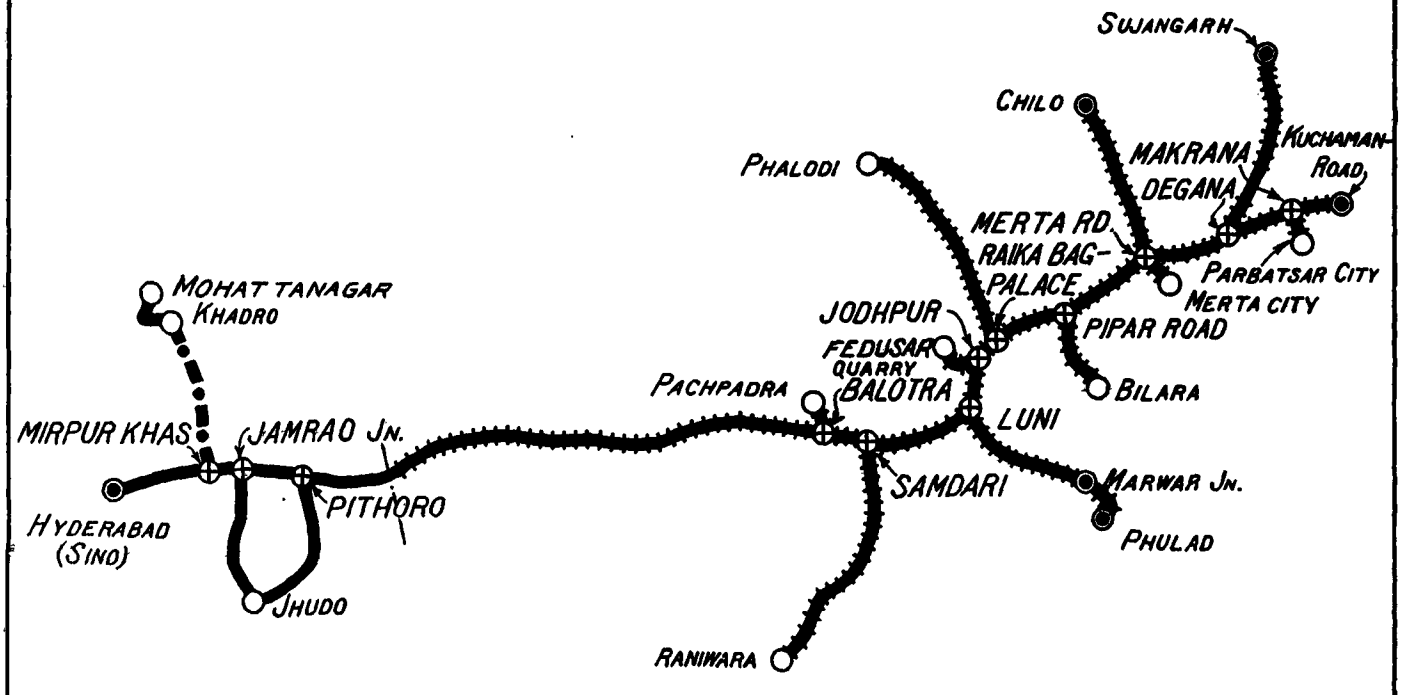
Home, Branch and Local line Junctions .....

Junctions connecting Foreign lines .....

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.

N



8. JODHPUR RAILWAY SYSTEM—*contd.*

(*a*) Jodhpur railway (3′ 3⅜″ gauge)—*contd.*

Agreement—

Nil. The railway which was worked by the administration of the Jodhpur-Bikaner railway, under an agreement, upto the 31st October 1924, is now maintained and worked by the Jodhpur Durbar.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix I to the Report for 1913-14).

Year	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	586·50	1,84,49,723	35,84,107	17,48,754	9·48	118	51·21
1914-15	604·19	1,95,50,053	30,69,518	14,66,772	7·50	98	52·21
1915-16	608·75	1,99,91,257	44,82,377	26,14,214	13·08	142	41·68
1916-17	608·75	2,04,66,528	45,70,000	24,73,885	12·09	144	45·87
1917-18	608·75	2,04,44,558	55,58,464	32,85,831	16·07	176	40·89
1918-19	608·75	2,14,26.974	58,17,634	31,94,292	14·91	184	45·09
1919-20	609·26	2,23,78,903	53,03,580	25,09,098	11·21	167	52·69
1920-21	609·26	2,40,53,293	53,34,025	21,79,234	9·06	168	59·14
1921-22	609·26	2,86,49,372	57,89,702	19,04,434	6·65	183	67·11
1922-23	609·26	2,95,20,571	62,87,563	21,97,730	7·44	198	65.05
1923-24	609·26	2.96,29,012	67,86,362	21,54,182	7·27	214	68·26
1924-25	609·26	3,05,01,197	81,49,464	35,40,524	11·61	257	56·56
1925-26	617·66	3,41,81,037	64,04,157	21,29,664	6·40	199	66·75
1926-27	617·66	3,58,00,464	63,20,699	26,98,655	7·54	197	57·30
1927-28	617·66	3,87,17,241	68,94,962	19,53,674	5·05	215	71·67
1928-29	693·26	4,11,21,628	72,66,209	25,74,561	6·26	202	64·57
1929-30	726·94	4,27,60,901	69,24,794	24,57,488	5·75	183	64·51
1930-31	752·81	4,44,04,050	73,12.907	35,98,003	8·10	186	50·80
1931-32	752·81	4,47,63,923	63,61,723	25,58,592	5·72	162	59·78
1932-33	751·36	4,48,60,401	62,22,795	28,53,323	6·36	159	54·15
1933-34	751·36	4,50,78,791	63,66,758	30,79,526	6·83	163	51·60
1934-35	751·36	4,59,36,832	71,51,352	37,52,945	8·17	183	47·52
1935-36	†766·94	4,68,33,264	75,68,699	34,72,610	7·41	189	54·12
1936-37	766·94	4,73,76,071	82,44,984	40,09,751	8·46	206	51·37
1937-38	766·94	4,78,80,749	85,26,722	42,92,819	8·97	213	49·65
1938-39	766·94	4,90,49,661	82,49,472	38,26,015	7·80	206	53·62

†The length (15·69 miles) of 'Marwar Jn. to Phulad' shown in the mileage statement No. 8 of Volume II of Railway Board's Administration Report for 1935-36 was taken from the centre of Marwar Jn. yard, whereas the actual additional line constructed is only 15·58 miles. This fact accounts for the difference of 0·11 miles between the figures of mileage shown in the Volume II for 1935-36 and in the above table against that year.

(*b*) Jodhpur-Hyderabad railway (British section) (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
*Hyderabad to Shadipalli	18-8-92	55·49		*The line from Hyderabad to Shadipalli was originally on the 5′ 6″ gauge but was converted to the 3′ 3⅜″ gauge and opened on the 29th October 1901. †Opened for goods traffic only.
Shadipalli to Jodhpur Frontier	22-12-00	68·49		
Mirpurkhas to Jhudo	18-4-09	50·43		
Jhudo to Pithoro	1-6-35	64·11		
Khadro to Pritamabad	†10-3-1939	10·06		
TOTAL OPEN MILEAGE	..	..	248·58	
Lines under construction or sanctioned for construction—				
Pritamabad to Nawabshah	..	20·66	20·66	

Details of construction—

Permanent-way.—About 14·78 miles are laid with 80 lb. rails, 57·72 miles laid with 60-lb. rails, 175·67 miles with 50-lbs., and 41 miles with 41¼-lb. rails. All flat-footed steel on deodar, sâl, steel trough and C. I. Pot sleepers.

Ballast.—The whole line is ballasted with broken stone.

8. JODHPUR RAILWAY SYSTEM—*contd.*

(*b*) Jodhpur-Hyderabad railway (British section) (3′ 3⅜″ gauge)—*contd.*

Details of construction—*contd.*

Fencing.—The line is fenced from Chhor to Ratanabad (51 miles) and from Rahoki to Hyderabad (7 miles). The line is unfenced from Frontier to Chhor (35 miles) and from Ratanabad to Rahoki (21 miles). Mirpurkhas Jhudo branch is unfenced.

Curves.—There are no curves with a radius of less than 1,432 feet.

Gradients.—The ruling gradient is 1 in 150.

Agreement—

The Jodhpur-Hyderabad Railway (British section) and the Mirpur Khas-Jhudo Railway were worked by the administration of the Jodhpur-Bikaner Railway up to 31st October 1924 (after which date the two railways have been worked by the administration of the Jodhpur railway under an agreement between the Government of India and His Highness the Maharaja of Jodhpur). The Mirpur Khas-Jhudo Railway was purchased by the Government of India from the Sind Light Railways, Ltd., on 1st January 1929 and amalgamated with the Jodhpur-Hyderabad Railway (British section) from the same date.

Main provisions of agreement—

(i) *Land.*—Provided by the Government of India at the cost of Capital.

(ii) *Government Aid.*—The railway is the property of the Government of India, but is managed, maintained, stocked and worked by the administration of the Jodhpur Railway as part of that system. All funds reasonably required for capital expenditure are supplied by, or on behalf of, the Secretary of State, the cost of rolling stock and stores, and of works, buildings, appliances and machinery on the Jodhpur Railway required for the joint working and use of the Jodhpur-Hyderabad Railway (British section) being met by the Jodhpur Durbar.

(iii) *Terms of working.*—The gross earnings of the Jodhpur Railway and Jodhpur-Hyderabad Railway (British section) are recorded separately; and except as provided below, the working expenses are divided between the two railways in the ratio of their respective gross earnings;

(*a*) The Law and Order Police maintained on the Jodhpur railway is provided by the Jodhpur Durbar at their cost, while the Law and Order Police maintained on the Jodhpur-Hyderabad Railway (British section) is provided by the Secretary of State at his cost.

(*b*) The cost of maintenance, renewals and replacements, of permanent way, buildings, bridges, etc., of the telegraph line and of electric installations and telephones in buildings properly chargeable to Revenue under Abstract 'A' and 'H' is recorded separately and debited to the working expenses of the Jodhpur-Hyderabad railway (British section), except that the charges for 'General Superintendence' under Abstracts 'A' and 'H' and for 'Losses on Stores' is apportioned on the basis of the gross earnings of the two railways. A charge of 2 per cent. per annum on the share of the capital expenditure attributable to the Jodhpur-Hyderabad Railway (British section) in respect of joint works and buildings provided by, and at the cost of, the Jodhpur Durbar, and of which the charges are debitable to Abstract 'A' and 'H' of the Revenue Account, is debited to the working expenses of the Jodhpur-Hyderabad Railway (British section) to cover the charges on account of maintenance, renewals and replacements of those joint works and buildings. Interest at 5 per cent. per annum on the capital expenditure incurred by the Jodhpur Durbar upto 31st March 1925, and at 4 per cent. per annum on the additional capital expenditure incurred subsequent to that date in the provision of rolling stock, works, buildings, appliances, machinery and stores in joint use of the railway to the extent to which such capital expenditure may be regarded as having been provided for the Jodhpur-Hyderabad Railway (British section) is also debited to the working expenses of this railway. This rate shall hold good for five years and then again be subject to reconsideration. The stores required exclusively for purposes of construction of capital works owned by the Durbar or by the Secretary of State, is excluded from the stores on which interest is chargeable.

(iv) *Distribution of profits.*—After payment of the working expenses shown under (iii) above, the balance of the gross earnings is paid to the Government of India.

(v) *Rates and fares.*—May be varied between the maximum and minimum limits prescribed by the Government of India.

(vi) *Special obligations as to the conveyance of*—

(*a*) Mails, troops, police, high Government officials and Government Stores.
(*b*) Government bullion and coin, and the persons incharge thereof.

} To be conveyed on the same conditions and at the same rates as may be in force from time to time on other railways of the same gauge belonging to the Government of India.

8. JODHPUR RAILWAY SYSTEM—*concld.*

(*b*) Jodhpur-Hyderabad railway (British section) (3′ 3⅝″ gauge)—*concld.*

Main provisions of agreement—*contd.*

(vii) *Power of the Government to determine agreement*—
(viii) *Power of the Jodhpur Durbar to surrender agreement*— } The agreement is terminable on 12 calendar months' notice given in writing by either party to the other. In the event of the separation of the working of the Jodhpur-Hyderabad Railway (British section) from that of the Jodhpur Railway the Secretary of State agrees to take over, on payment of the proportionate book value, the rolling stock and on payment of the proportionate depreciated value, the machinery, plant and stores, attributable to the Jodhpur-Hyderabad Railway (British section), all the rolling stock, machinery, plant and stores so attributable being determined on the basis of the ratio of the average of gross earnings of the Jodhpur-Hyderabad Railway (British section) to the average of the gross earnings of Jodhpur Railway (Indian State section) during the three years immediately preceding the separation.

If in consequence of the separation it is found that any joint works or buildings deemed necessary for joint working, and which were provided at the cost of the Jodhpur Durbar, are surplus to the Durbar's requirements, compensation thereon will be paid to the Durbar on any reasonable basis that may be agreed upon between the Secretary of State and the Durbar.

Statistics of working. (Those for the periods prior to 1902 will be found in Appendix 38 to the Railway Administration Report for 1907).

NOTE.—From the year 1936-37 the $\frac{\text{Net earnings}}{\text{Working expenses}}$ have been arrived at after taking into account the appropriation to Depreciation Reserve Fund instead of actual expenditure on 'Replacements & Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1902 .	123·98	40,45,972	5,04,008	2,18,814	5·41	1,59,771	+59,043	78	56·59
1903 .	123·98	40,45,338	5,84,094	2,62,379	6·49	1,60,179	+1,02,200	91	55·08
1904 .	123·98	39,58,081	6,48,728	3,45,007	8·72	1,54,846	+1,90,161	101	46·82
1905 .	123·98	39,67,948	7,23,989	3,69,002	9·30	1,58,622	+2,10,380	112	49·03
1906 .	123·98	40,70,635	8,91,456	5,11,938	12·58	1,57,778	+3,54,160	138	42·57
1907 .	123·98	40,23,073	8,05,017	3,57,918	8·90	1,21,968	+2,35,950	125	55·54
1908 .	123·98	42,81,148	7,59,479	3,34,028	7·80	1,49,807	+1,84,221	118	56·02
1909 .	123·98	42,93,099	8,19,444	2,69,834	6·28	1,41,400	+1,28,434	127	67·10
1910 .	123·98	42,32,763	9,00,091	3,80,517	8·99	1,42,724	+2,37,793	140	57·72
1911 .	123·98	42,01,757	12,02,852	6,94,934	16·54	1,42,970	+5,51,964	187	42·23
1912 .	123·98	42,19,491	13,53,633	6,84,232	16·22	1,46,742	+5,37,490	210	49·45
1st qr. of 1913	123·98	42,42,650	3,23,858	1,99,608	4·70	40,484	+1,59,124	201	38·37
1913-14	123·98	43,71,962	13,02,806	6,30,706	14·43	1,45,927	+4,84,779	202	51·59
1914-15	123·98	44,21,306	9,81,834	3,64,426	8·24	1,53,847	+2,10,579	152	62·88
1915-16	123·98	44,45,252	12,72,371	5,98,124	13·46	1,53,946	+4,44,178	197	52·98
1916-17	123·98	44,66,439	14,26,998	6,60,256	14·78	1,46,882	+5,13,374	221	53·79
1917-18	123·98	45,17,708	20,08,227	11,18,516	24·76	1,56,010	+9,62,506	311	44·39
1918-19	123·98	45,46,805	18,98,253	9,60,633	21·13	1,57,759	+8,02,874	264	49·30
1919-20	123·98	45,73,426	16,35,385	6,25,422	13·68	1,57,756	+4,67,666	254	61·76
1920-21	123·98	46,17,926	17,78,556	5,05,160	10·94	1,55,236	+3,49,924	276	71·60
1921-22	123·98	46,58,877	17,28,182	2,37,652	5·10	1,59,014	+78,638	268	86·25
1922-23	123·98	48,36,078	18,51,602	2,22,566	4·60	1,63,919	+58,647	287	87·98
1923-24	123·98	51,54,998	23,60,014	6,37,388	12·36	1,78,624	+4,58,764	366	72·99
1924-25	123·98	54,16,928	28,49,877	8,25,393	15·24	1,93,920	+6,31,473	442	71·04
1925-26	123·98	58,08,534	23,29,536	2,98,906	5·12	2,13,398	+85,508	360	87·17
1926-27	123·98	63,67,283	21,20,825	2,36,480	3·71	2,36,564	—84	329	88·85
1927-28	123·98	69,74,132	21,49,917	—1,47,585	..	2,67,108	—4,14,693	333	106·86
1928-29	174·41	82,83,575	25,07,034	7,14,919	8·63	3,26,562	+3,88,357	276	71·48
1929-30	174·41	83,71,629	23,33,919	5,40,103	6·45	3,53,546	+1,86,557	257	76·68
1930-31	174·41	83,75,538	22,53,559	5,48,344	6·55	3,71,225	+1,77,119	248	75·67
1931-32	174·41	84,31,695	19,71,761	4,69,378	5·57	3,70,969	+98,409	216	76·19
1932-33	174·41	86,06,548	22,40,864	4,19,338	4·87	3,73,036	+46,302	246	81·29
1933-34	174·41	86,40,008	28,22,197	8,34,934	9·66	3,74,234	+4,60,700	310	70·42
1934-35	174·41	1,01,59,769	33,34,978	12,63,336	12·43	4,05,057	+8.58,279	367	62·12
1935-36	238·52	1,11,78,385	35,88,756	13,62,862	12·19	4,61,751	+9,01,111	288	62·02
1936-37	238·52	1,15,66,215	37,26,507	15,11,752	13·07	4,82,071	+10,29,681	300	59·43
1937-38	238·52	1,18,41,075	39,16,488	16,60,659	14·02	4,93,009	+11,67,650	315	57·60
1938-39	248·58	1,24,14,231	36,59,552	13,41,927	10·81	5,08,595	+8,33,332	294	63·33

8. JODHPUR RAILWAY SYSTEM—*contd.*

(c) Mirpur Khas-Khadro railway (3′ 3⅜″ gauge)—

The Mirpur Khas-Khadro Railway is owned by the Sind Light Railways, Limited.

Progress in opening—

Section of railway	Date of opening.	Miles.	Total.
1	2	3	4
Mirpur Khas to Khadro	1-1-12	49·50	49·50

The line is owned by the Sind Light Railways, Ltd.

Details of construction—

Permanent-way.—The line is laid with 60-lb. iron rails for 3·99 miles, 50-lb. rails for 8 miles and 36-lb. rails for 37 miles. The sleepers used are deodar, and sâl.

Ballast.—About 22 miles are ballasted with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Agreement—

Contract, dated 9th June 1913, *between the Secretary of State and the Sind Light Railways, Ltd.*, as to the provision of funds for the construction of the Mirpur Khas-Khadro Railway.

Contract, dated 9th June 1913, *between the Secretary of State and the Sind Light Railways, Ltd.*, for the construction and working of the Mirpur Khas-Khadro Railway.

The Mirpur Khas-Khadro Railway was constructed, and worked up to the 31st October 1924, by the administration of the Jodhpur-Bikaner Railway. After that date it has been worked by the Administration of the Jodhpur Railway under an agreement between the Government of India and His Highness the Maharaja of Jodhpur.

Main provisions of agreement—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government Aid.*—The railway is worked, under an agreement between the Government of India and the Sind Light Railways, Limited, in conjunction with and as part of the Jodhpur-Hyderabad Railway (British section).

(iii) *Terms of working*—
(iv) *Distribution of profits*— } As between the Government of India and the Sind Light Railways Limited, the Government of India undertake the management, maintenance, provision of rolling stock and working, through State, or other agency (that at present employed being the administration of the Jodhpur Railway) for 40 per cent. of the gross earnings. The remainder, being the net earnings of the railway, is paid by the working agency to the Company.

As between the Government of India and the administration of the Jodhpur Railway, the Company's railway is managed, maintained, stocked and worked by the administration of the Jodhpur Railway in conjunction with, and as if it had originally been a part of, the Jodhpur-Hyderabad Railway (British section), and is subject to the provisions of the agreement between the Government of India and His Highness the Maharaja of Jodhpur.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores—
(*b*) Government bullion and coin and the persons in charge thereof— } **As noted under Jodhpur-Hyderabad Railway (British section) 3′ 3⅜″ gauge.**

8. JODHPUR RAILWAY SYSTEM—*concld.*

(c) Mirpur Khas-Khadro railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreement—*contd.*

(vii) *Power of the Government to determine contract.*—Government of India may determine the contract by 'Notice of purchase' either on the 31st day of December in the twenty-first year after the opening of the line for traffic, or on the 31st December in the last year of any subsequent period of 10 years, paying to the Company 25 times the amount of the average yearly net earnings of the railway during the 3 years immediately preceding the purchase, provided that such sum shall not exceed by more than 20 per cent., nor be less than, the total capital expenditure.

Government may also determine the contract and purchase the railway in the following events :—

(*a*) if it is considered desirable that the gauge of the railway should be altered ;

(*b*) if it is considered desirable to convert the railway into a line of through communication ; and

(*c*) if it is considered desirable to extend the line (without altering the gauge or making the railway part of a through route) and the Company is unable or unwilling to supply the necessary capital for the purpose ;

on payment to the Company 25 times the average net earnings during the 3 years preceding the purchase or 115 per cent. of the capital expenditure whichever shall be the greater, but if the purchase occurs within less than 3 years from the opening of the line the price shall be 115 per cent. of the capital expenditure.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	49·50	8,22,222	83,334	50,000	6·08	32	40·00
1914-15	49·50	8,22,603	69,806	41,884	5·09	27	40·00
1915-16	49·50	8,23,096	70,237	42,142	5·12	27	40·00
1916-17	49·50	8,22,096	85,302	51,182	6·22	33	40·00
1917-18	49·50	8,22,096	94,547	56,728	6·89	37	40·00
1918-19	49·50	8,23,897	97,727	58,636	7·12	38	40·00
1919-20	49·50	8,24,289	1,27,060	76,236	9·25	49	40·00
1920-21	49·50	8,25,621	1,21,168	72,701	8·81	47	40·00
1921-22	49·50	8,27,666	1,04,073	22,443	7·54	40	40·00
1922-23	49·50	8,31,125	1,33,241	79,945	9·62	52	40·00
1923-24	49·50	8,31,783	1,78,375	1,07,025	12·87	69	40·00
1924-25	49·50	8,35,396	1,64,042	98,425	11·78	64	40·00
1925-26	49·50	8,39,869	1,82,223	1,09,335	13·02	71	40·00
1926-27	49·50	8,53,066	1,47,658	88,595	10·39	57	40·00
1927-28	49·50	8,53,109	1,24,275	74,564	8·74	48	40·00
1928-29	49·50	8,56,487	1,50,186	90,112	10·52	58	40·00
1929-30	49·50	8,56,487	1,09,412	65,647	7·66	43	40·00
1930-31	49·50	8,57,165	1,17,224	70,335	8·21	45	40·00
1931-32	49·50	8,58,657	93,517	56,110	6·53	36	40·00
1932-33	49·50	8,61,493	1,06,979	64,187	7·45	41	40·00
1933-34	49·50	9,07,534	1,86,998	1,05,608	11·64	72	*43·53
1934-35	49·50	9,15,769	2,24,409	1,34,646	14·70	87	40·00
1935-36	49·50	9,47,993	2,18,845	1,31,307	13·85	85	40·00
1936-37	49·50	9,58,605	2,15,848	1,29,509	13·51	84	40·00
1937-38	49·50	9,71,139	2,21,617	1,32,970	13·69	86	40·00
1938-39	49·50	9,79,198	2,01,155	1,20,693	12·33	78	40·00

*On account of direct debit of Rs. 6,591 in working expenses, the proportion of expenses to earnings has increased to 43·53 instead of 40 per cent.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM.

Chairman and Managing Director.—BRIGADIER-GENERAL SIR CHARLES LANE MAGNIAC, C.M.G., C.B.E., LATE R. E.

Secretary.—V. CRASTER, Esqr., O.B.E.

Offices.— Guilderoft, Epsorn Road, Guildford, Surrey, England.

Date of registration of the former guaranteed Company.—1853.

The former Madras Guaranteed Railway Company's contract having expired on the 31st December 1907 the lines owned by that Company were purchased by the Secretary of State for India, and on the 1st January 1908 the then existing Madras railway (with the exception of the Jalarpet-Mangalore section), together with the 3′ 3⅜″ gauge sections of the South Indian railway from Katpadi to Gudur and Pakala to Dharmavaram, was made over to the Southern Mahratta Railway Company for working, the enlarged Company being styled the Madras and Southern Mahratta Railway Company.

In addition to the lines now comprised in the system, the Company, up to the 30th September 1919, worked the lines, Birur to Shimoga, Mysore to Nanjangud and Mysore to Bangalore all of which were made over to the Mysore Durbar on the 1st October 1919.

The Bangalore-Harihar and Hindupur-Yesvantpur Railways worked by the Company were transferred to the Mysore State Railway with effect from 1st January 1938.

The Bezwada-Masulipatam Branch line which was the property of the District Board of Kistna was purchased by the Government on the 4th February 1938, and is worked as an integral part of the M. & S. M. Railway (Metre Gauge).

Lines comprised in the system.—The Madras and Southern Mahratta railway system is made up of—

	Open lines. Miles.
(*a*) Madras and Southern Mahratta railway (5′ 6″ gauge)	1,119·10
(*b*) Kolar Gold-fields railway (5′ 6″ gauge)	9·88
(*c*) Tenali-Repalle railway (5′ 6″ gauge)	21·41
(*d*) Madras and Southern Mahratta railway (3′ 3⅜″ gauge)	1,712·13
(*e*) Alnavar-Dandeli (Provincial railway) (3′ 3⅜″ gauge)	19·12
(*f*) Kolhapur State railway (3′ 3⅜″ gauge)	29·27
(*g*) Sangli State railway (3′ 3⅜″ gauge)	4·90
(*h*) West of India Portuguese railway (3′ 3⅜″ gauge)	51·04
Total	2,966·85

Running powers—

Foreign lines over home line—

(1) South Indian railway, over whole or any part of the Madras-Bangalore section	for passenger and goods trains.	219·00
(2) Mysore State Railway over the Section Mysore Frontier to Hindupur	for passenger and goods trains.	6·86
Total		225·86

(*a*) Madras and Southern Mahratta railway (5′ 6″ gauge)—

The Madras and Southern Mahratta 5′ 6″ gauge railway is defined to be the former Madras railway (with the exception of the Jalarpet-Mangalore section), and the southern section of the former East Coast railway (called the North-East line of the former Madras railway).

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	REMARKS.
1	2	3	4	5	6
SOUTH-WEST LINE—					
Main line—					
Madras to Veyasarpaudy	7-4-73	2·16			
Veyasarpaudy to Walajah Road (Arcot)	1-7-56	63·22			
Walajah Road (Arcot) to Katpadi	7-5-57	14·96			
Katpadi to Gudiyattam	19-5-58	15·36			
Gudiyattam to Ambur	16-1-60	17·01			
Ambur to Vaniyambadi	1-2-60	9·98			
Vaniyambadi to Jalarpet	23-5-60	10·76			
			134·45		
Branches—					
Rayapuram branch—					
Veyasarpaudy to Rayapuram	1-7-56	2·16			
Rayapuram to Beach	22-1-00	1·03			
Washermenpet to Basin bridge	15-3-07	1·01			
Korukkupettai to Veyasarpaudy	16-2-31	1·12			
			5·32		
Ranipet branch—					
Walajah Road (Arcot) to Ranipet	17-4-99	4·17			
			4·17		
Bangalore branch—					
Jalarpet Junction to Bangalore Cantonment	1-8-64	84·37			
Bangalore Cantonment to Bangalore City	1-7-82	3·05			
			87·42		
Carried over				231·36	

M & S. M. RAILWAY SYSTEM.

REFERENCES.

	5'-6"	3'-3 3/8"
M & S. M. Railway	▬▬	▬▬
State lines		▬▬
Indian State lines	▬▬	▬▬
District Board's lines	▬▬	
Foreign line		•••••••
Home, Branch & Local line Junctions	⊕	⊕
Junctions connecting Foreign lines	◉	◉

SCALE IN MILES.

0 25 50 75 100 150 MILES.

POONA
SHOLAPUR
HOTGI
SANGLI
MIRAJ
KOLHAPUR
RAICHUR
LONDA
MORMUGAO HARBOUR (PORTUGUESE)
SI MILE S.
ALNAVAR
GADAG
DANDELI
HUBLI
HOSPET
GUNDA RD.
KOTTUR
BELLARY
RAYADRUG
SAMEHALLI
HARIHAR
DHARMAVARAM
HINDUPUR
DRONACHELLAM
GUNTAKAL
GOPALAPATNAM
SAMALKOT
COCANADA TOWN
COCANADA PORT
KOTIPALLE
NIDADAVOLU
BEZWADA
BHIMAVARAM
NARASAPUR
SOMAGUNDAM
MACHERLA
GUNTUR
GUDIVADA
MASULIPATAM PORT
REPALLE
TENALI
GUDUR
RENIGUNTA
PAKALA
KATPADI
BANGALORE CITY
BOWRINGPET
(GOLD MINES)
MARIKUPPAM
RANIPET
JALARPET
ARKONAM
WALAJAH RD
MADRAS (BEACH)
MADRAS (CENTRAL)

N

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*a*) Madras and Southern Mahratta railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway. 1	Date of opening. 2.	Miles. 3	Total. 4	Grand total. 5	Remarks. 6
Brought forward	..	..	..	231·36	
NORTH-WEST LINE—					
Main line—					
Arkonam to Nagari	4-3-61	17·27			
Nagari to Puttur	8-12-61	9·59			
Puttur to Renigunta	15-9-62	14·46			
Renigunta to Reddipalle	1-10-64	38·02			
Reddipalle to Cuddapah	1-9-65	39·59			
Cuddapah to Muddanuru	1-8-66	34·31			
Muddanuru to Tadpatri	1-9-68	32·07			
Tadpatri to Gooty	1-8-69	29·72			
Gooty to the Tungabhadra river	12-12-70	75·33			
Tungabhadra to Raichur	15-3-71	17·92			
			308·28		
NORTH-EAST LINE—				308·28	
Basin bridge to Korukkupettai	15-3-07	1·06			
Washermenpet to Ennore	22-2-96	8·77			
Ennore to Gudur	23-2-99	75·25			
Gudur to Nellore	*1-11-88	23·75			
Nellore to Kistna Canal	20-12-98	155·00			* The date of opening of the original 3′—3⅜″ gauge line which was converted to and opened on the 5′—6″ gauge on the 1st November 1899. †27·38 miles include 0·30 miles between Kotipalle and Somagundam opened on 1st October 1934.
Kistna Canal to Bezwada	15-7-97	3·50			
Bezwada to Kovvur	20-2-93	88·24			
Kovvur to Rajahmundry	6-8-00	4·69			
Rajahmundry to the Junction point near Waltair	15-7-93	119·47			
			479·73		
Branches—					
Samalkot Junction to Cocanada port branch	15-7-93	9·75			
			9·75		
Guntur to Tenali	18-3-16	15·68			
			15·68		
Nidadavolu-Narasapur	3-2-29	46·92			
			46·92		
Cocanada—Somagundam	1-11-29	†27·38	27·38	579·46	
TOTAL OPEN MILEAGE	..	..	..	1,119·10	
DOUBLE LINE—					
Washermenpet to Basin bridge	15-3-07	1·01			
Basin Bridge to Korukkupet	1-7-31	1·06			
Arkonam to Nagari (at Arkonam station yard)	-11-27	1·36			
Washermenpet to Veyasarpaudy	14-9-01	1·26			
Madras to Veyasarpaudy Junction	7-4-73	2·16			
Villivakkam to Avadi	1-5-77	6·63			
Avadi to Tiruvallur	20-7-77	12·89			
Tiruvallur to Arkonam	28-8-77	16·52			
Rayapuram to Tiruvottiyur	27-1-30	5·28			
TOTAL DOUBLE LINE	..	..	48·17		
QUADRUPLE LINE					
Veyasarpaudy to Villivakkam	18-11-29	3·71	3·71		

Details of construction—

Permanent-way.—

South-West line.—The line is laid with:

(1) 90 lbs. B. H. rails on C. I. pots from mile 3/15 to 5/16-17; 6/11-12 to 12/18; 14 to 25; 27 to 39 : 40 to 71; 71¾ to 97½; 98 to 106; 106½ to 131/20; 132/23 to 133⅞.

(2) 90 lbs. B.H. rails on wooden sleepers from mile 0/7 to 3/15; 5/16-17 to 6/11-12; 71 to 71¾; 97½ to 98; 106 to 106½; 131/20 to 132/23.

(3) 90 lbs. B. H. rails on C. I. pots and wooden sleepers from mile 12/18 to mile 14; 25 to 27; 39 to 40.

(4) 80 lbs. B. H. rails on C. I. pots from mile 0 (Madras) to mile 0/7; 133⅞ to 205; 206 to 210; 211 to 221 (Bangalore City).

(5) 80 lbs. B. H. rails on C. I. pots and wooden sleepers from mile 205 to mile 206; 210 to 211.

North-West line.—The line is laid with:

(1) 90 lbs. B. H. rails on wooden sleepers from mile 41/22 (Arkonam) to mile 43/1-2; 175/2 to 175/9 211⅞ to 212 3/16; 233⅜ to 233⅝.

(1) *a*. 90 lbs. B.H. Rails on C. I. Pots from mile 43/1-2 to 59/10-11.

(2) 80 lbs. B. H. rails on C. I. pots from mile 59/10-11 to mile 136; 137 to 175/2; 175/9 to 211⅞; 212 3/16 to 233⅜; 233⅝ to 275; 275⅝ to 276/10; 278½ to 282½.

(3) 80 lbs. B. H. rails on wooden sleepers from mile 333¼ to mile 334.

(4) 80 lbs. B. H. rails on longitudinal timbers from mile 136 to mile 137.

(5) 76 lbs. B. H. rails on C. I. pots from mile 275 to mile 275⅝; 282½ to 310¼; 312⅝ to 332¼.

(6) 75 lbs. B. H. rails on C. I. pots from mile 276/10 to mile 278½; 310¼ to 312⅝.

(7) 75 lbs. D. H. rails on C. I. pots from mile 332¼ to 333¼ and 334 to mile 350½ (Raichur).

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*a*) **Madras and Southern Mahratta railway** (5′ 6″ gauge)—*contd.*

Details of construction—*concld.*

North-East line.—The line is laid with :—

(1) 90 lbs. B. H. rails on wooden sleepers from Basin Bridge to Korukkupettai (a distance of 1·06 miles).

(2) 90 lbs. F. F. rails on wooden sleepers from Korukkupettai to mile 84/6½; 97⅝ to 108⅜; 108⅝ to 109¼; 128⅞ to 129¾; 409/2 to 463/16.

(3) 90 lbs. F. F. on steel trough sleepers from mile 108⅜ to mile 108⅝; 109¼ to 128⅞; 129¾ to 132/18½.

(4) 90 R. F. F. Rails on wooden sleepers from mile 84/6½ to mile 88¾; 89 to 97-5/8; 194/20 to 195/12-13; 220/4 to 259/3; 264 to 264/17; 266/22 to 371-5/8; 390, to 391 and 463/16 to 470/5.

(5) 90 R. F. F. rails on steel trough sleepers from mile 88¾ to mile 89; 132/18½ to 194/20; 195/12-13 to 220/4; 259/3 to 264; 265/9½ to 266/22; 371⅝ to 390; 391 to 409/2; and 470/5 to 478/18¾.

(6) From mile 264/17 to 265/9½; the line is laid with 75 lbs. F. F. rails on longitudinal timber (over Kistna Bridge).

Branches—

The Walajah Road-Ranipet branch is laid with 75-lb. double-headed and 75-lb. B. H. steel rails on cast iron pots.

The Samalkot-Cocanada; Cocanada Somagundam, Guntur-Tenali and Nidadavolu-Narasapur Branches are laid with 75-lb. flat-footed steel rails on wooden sleepers.

Ballast—The line is ballasted with stone and sand, chiefly the latter.

Fencing.—The North-West and South-West lines are fenced throughout and the North-East line only in the vicinity of towns, stations and level crossings.

Curves.—The sharpest curve is of 800 feet radius.

Gradients.—The ruling gradient between Madras and Jalarpet is 1 in 177; between Jalarpet and Bangalore, 1 in 80 (except at Kuppam Ghat, where it is 1 in 68), and between Bangalore cantonment and Bangalore city, where it is 1 in 76; between Walajah Road and Ranipet 1 in 150, between Arkonam and Rennigunte 1 in 80; between Renigunta and Nandalur 1 in 100 (except at Ballapalli Ghat where it is 1 in 60); between Nandalur and Cudapah 1 in 90, Cudapah and Gooty 1 in 129, Gooty and Raichur 1 in 104; between Madras and Rajahmundry 1 in 200 except between Basin Bridge and Korukkupettai where it is 1 in 120 and between Kovvur and Godavari where it is 1 in 150; between Rajahmundry and Gopalapatnam 1 in 150.

Contracts—

Dated the 1st June 1882 (called the original contract), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the construction and working of a system of railways in the South Mahratta country to be called the Southern Mahratta railway.

Dated the 28th October 1885 (supplemental to that of 1882), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the construction and working of the West Deccan railway.

Dated the 31st August 1887 (supplemental to those of 1882 and 1885), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the construction and working of a line from Ranibennur to Harihar and a line from Bellary to Guntakal.

Dated the 31st August 1887 (supplemental to those of 1882, 1885 and 1887), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the construction, maintenance and working of the Mysore State railway.

Dated the 27th February 1889 (supplemental to those of 1882, 1885 and 1887), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the completion and working of the Bellary-Kistna railway.

Dated the 21st August 1898 (supplemental to those of 1882, 1885, 1887 and 1889), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the working of the British section of the Guntakal-Yesvantpur railway.

Dated the 8th April 1903 (supplemental to those of 1882, 1885, the secondly mentioned contract of 1887, and that of 1889), *between the Secretary of State and the former Southern Mahratta Railway Company*, as to the adoption of 1*s.* 4*d.* as the "prescribed" rate of exchange. [Since cancelled under the contract of 19th November 1923.]

Dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing contracts subject to the variations and modifications thereof as therein set forth.

Dated the 16th March 1911, *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, supplemental to, and in amendment of certain particulars in, that of 1908.

Despatch from the Secretary of State, No. 66-Railway, dated the 9th August 1912, in regard to the issue of further capital by the Company.

Dated the 11th February 1914 (supplemental to that of 1908), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, in regard to the issue of debentures and debenture stock.

Dated the 20th May 1914 (supplemental to the contracts of 1882, 1885, 1887, 1889, 1898, 1903, 1908 and 1911), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(a) **Madras and Southern Mahratta railway** (5′ 6″ gauge)—*contd.*

Contracts—*concld.*

Dated the 12th August 1914 (supplemental to the contracts of 1882, 1885, 1887, 1889, 1898, 1903, 1908 1911 and 20th May 1914), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the construction, maintenance and working of the Guntur-Tenali section of the Guntur-Repalle railway as part of the undertaking of the Company.

Dated the 19th November 1923 (supplemental to the contracts quoted above) *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to compiling accounts and statistics annually instead of half-yearly from 1st April 1920 and as to the rate of exchange for the conversion of sterling transactions from 1st October 1921.

Dated the 24th October 1924 (supplemental to the contracts of 1887, 1903, 1908 and 20th May 1914) *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to transfer of Mysore-Nanjangud, Birur-Shimoga and Mysore-Bangalore sections of the Mysore railway to the Mysore Durbar with effect from the 1st October 1919.

Dated the 18th November 1925 (supplemental to the principal contract of 1908 and those of the 16th March 1911 and 12th August 1914), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to temporary exclusion from the Government capital of certain advances by the Secretary of State.

Dated the 6th May 1929 (Supplemental to the contracts of 1882, 1885, 1887, 1889, 1898, 1908, 1911, 1914, 1923, 1924 and 1925) *between the Secretary of State and the M. and S. M. Railway Company* as to the adoption of 1*s.* 6*d.* as the prescribed rate of exchange for the conversion of sterling money from 1st October 1928.

Dated the 24th day of February 1930 (Supplemental to the contracts of 1882, 1885, 1887, 1889, 1898, 1908, 1911, 1914, 1923, 1924, 1925 and the deed of 1929) *between the Secretary of State and the M. and S. M. Railway Company* as to the construction, maintenance and working of further six lines and as to advances by the Secretary of State.

Deed dated 15th day of January 1937 *between the Secretary of State in Council of India and the Madras and Southern Mahratta Railway Co. Ltd.*, as to the fixing of amount of rent payable by the Postal Department of the Government of India.

Deed dated 24th day of March 1937 *between the Secretary of State in Council of India and the Madras and Southern Mahratta Railway Co., Ltd.*, for the continued working of the Company and State Lines.

Main provisions of contracts—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*—(*a*) Interest in sterling is guaranteed at 3½ per cent. per annum on the nominal amount of capital stock, for the time being, of the Company, and is payable half-yearly by the Secretary of State, the Government being entitled to retain out of the Company's share of surplus profits for the year the rupee-equivalent of this interest. If the Company's share for the year be less than the guaranteed interest, the deficiency is not to be made good out of the Company's share of a subsequent year.

(*b*) Moneys for capital expenditure are provided at the Secretary of State's option, either by advances made by him, or by the issue of debentures or debenture stock or further capital stock of the Company; such issues can only be made with the Secretary of State's approval.

(*c*) Debentures falling due are discharged by advances made by the Secretary of States.

[NOTE.—The advances made by the Secretary of State under (*b*) and (*c*) above are, until repaid, treated as further capital contributed by him. All moneys raised by the Company on debentures or debenture stock or capital stock are applied, in the first place, to the repayment of these advances.]

(*d*) Interest due on debentures or debenture stock is paid in sterling by the Secretary of States.

[NOTE.—This interest converted into Indian currency at the uniform rate of 1*s.* 6*d.* per rupee from 1st October 1928 is repaid to the Secretary of State out of the net earnings of each half-year.]

(iii) *Distribution of profits.*—After deducting from the gross earnings of the Company's and State lines for the half-year, arrived at by deducting the payment of rebate to the South Indian Railway the working expenses (which include the contributions made under the rules to the Provident Fund and the haulage payable to the South Indian Railway), the net earnings upto and including 31-12-1937 are applied :—

(*a*) in payment of rebate to the Bezwada-Masulipatam Railway if any [see parenthetical note under (*c*) below] :

(*b*) in repayment to the Secretary of State of the interest paid on debentures [see (ii) (*d*) above]. But the undertaking is to be credited half-yearly with a sum equal to the guaranteed interest paid on the average amount, if any, held by the Secretary of State during the half-year, of the unexpended balances of issues of capital made for the purposes of the undertaking; and

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*a*) Madras and Southern Mahratta railway (5′ 6″ gauge)—*contd.*

Main provisions of contracts—*contd.*

(*c*) the surplus is divided between the Secretary of State and the Company in proportion to the respective shares in which the capital, for the time being (excluding debenture capital), has been contributed by them. The Secretary of State's capital is taken at a sum of £11¼ millions, to which is added the amount up to date of his advances; and the Company's capital at £5 millions, the amount for the time being of their share capital. From the Company's share is deducted the guaranteed interest on their capital advances for the year.

NOTE 1.—The Secretary of State has agreed as a temporary measure to the exclusion from the Government Profit Sharing Capital of all further advances made by him up to 30th September 1930 on the understanding:—

(*i*) that interest at the rate of 5½ per cent. per annum on the amount of advances up to 30th September 1928, and at the rate of 6 per cent. per annum on the advances from 1st October 1928 to 30th September 1930, shall be charged against the net earnings of the undertaking before the division of the surplus and

(*ii*) that the Secretary of State shall retain his right to call upon the Company at any time to repay the whole or any part of the advance referred to.

The principle that the Secretary of State's advances are to rank as profit sharing capital has not been surrendered but merely suspended as regards advances made up to 30th September 1930.

Advances made from the 1st October 1930 will rank as profit sharing capital in accordance with the provisions of the contract of 1908.

NOTE 2.—The capital expended on the construction of the Nidadavolu-Narsapur, Gudivada-Bhimavaram, Cocanada-Kotipalli and Guntur-Gurzala-Macherla railways should be charged at interest not exceeding 5½ per cent. and not as profit sharing capital of the Secretary of State.

NOTE 3.—25 per cent. of the gross earnings derived by the Madras-Bangalore section from traffic carried over that section in South Indian railway trains is payable as haulage to the South Indian railway. In addition, the South Indian railway receives a rebate of 25 per cent. of the gross earnings derived by the Madras-Bangalore section from the traffic interchanged between that section and the Jalarpet Mangalore section, *via* Jalarpet.

The terms of the rebate payable to the Kistna Local Board in respect of the Bezwada-Masulipatam railway are given under Bezwada-Masulipatam railway (3′—3-3/8″ gauge). The payment of rebate ceased however on 4th February 1938 the line having been purchased by Government.

(*iii*) (A). After deducting from the Gross Earnings of the Companys and State Lines for the half year arrived at by deducting the payment of rebate to the South Indian Railway, the working expenses (which include the contributions made under the rules to the Provident Fund and the haulage payable to the South Indian Railway) the net earnings on and from 1st January 1938 are applied:—

(*a*) in payment of rebate to the Bezwada-Masulipatam Railway upto 3rd February 1938, if any;

(*b*) in repayment to the Secretary of State of the interest paid on debentures and debenture stock, which shall have been issued with the sanction of the Secretary of State for the purpose of capital expenditure on the Company's and State Lines which shall for the time being be outstanding;

(*c*) in repayment to the Secretary of State of the interest at 3½% per annum paid on the total Company's Capital;

(*d*) in payment to the Secretary of State of the interest at 3½% per annum on the total Government capital and advances to 31st December 1937 and thereafter or at such other rate as from time to time shall have been agreed upon in the case of further advances made subsequent to the 31st day of December 1937;

(*e*) in the next place in providing for such other debits as it may be agreed should be charged against such receipts;

and (*f*) the resulting surplus after combining the surpluses or surplus and deficit for the half years in the financial year is divided between the Secretary of State and the Company in the following manner:—

(*i*) In payment to the Company of 1/10th of the first Rs. 75 lakhs of such surplus; 1/20th of the next Rs. 15 lakhs and 1/30th of the excess, if any, over the first Rs. 90 lakhs and

(*ii*) the balance is retained by the Secretary of State.

(iv) *Rates and fares.*—Maxima and minima for each class and description of passengers and goods are fixed by the Government, who also prescribe the several classes and descriptions. If the Government require the Company to reduce the rates for salt below those in force on the 28th June 1908, the Company are to be compensated for any loss ensuing.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—

(*b*) Government bullion and coin, and the persons in charge thereof.—

} To be conveyed on the same general conditions and at the rates in force on State railways of similar gauge.

(vi) *Power of the Government to determine contract.*—The railway and all its appurtenances are absolutely the property of the Government, which may determine the contract on the 31st December 1945, or on the 31st December in any succeeding fifth year reckoning from the date, by giving to the Company in London not less than twelve months' previous notice. Upon the termination of the contract the Company are to give the Government the possession of the railway; and the Government are to pay the Company a sum equal to the nominal amount of its share capital, *viz.*, £5,000,000, and of any additional paid-up capital stock that may have been issued for the purpose of the Company's and State lines.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*a*) Madras and Southern Mahratta railway (5′ 6″ gauge)—*concld.*

Main provisions of contracts—*concld.*

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract.*—The contract is determinable only as noted under (vi) above.

Statistics of working—

Note.—(*i*) The amount of sterling liabilities involved in the purchase of railways, included in the figures shown in col. 3 below against 1933-34 and 1934-35, has been converted at the rates of exchange ruling at the time when the liabilities came into being, as against the statutory rate of exchange, *i.e.*, 1*s.* 6*d.* previously adopted. From the year 1935-36 onwards, the same amount has been reconverted at the latter rate.

(*ii*) From the year 1936-37, the $\frac{\text{Net earnings}}{\text{Working expenses}}$ have been arrived at after taking into account the appropriation to Depreciation Reserve Fund instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay, or capital at charge, given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	1,031·73	16,69,79,297	1,64,22,683	44,96,942	2·69	306	72·62
1909	1,031·73	17,06,51,720	1,79,33,335	72,97,315	4·28	334	59·31
1910	1,031·73	17,37,06,686	1,88,12,095	80,93,571	4·66	351	56·98
1911	1,031·73	17,73,67,663	1,96,36,910	89,15,549	5·03	366	54·60
1912	1,031·73	17,80,88,139	2,16,88,462	1,03,95,264	5·84	404	52·07
1st qr. of 1913 . .	1,031·73	17,97,20,709	59,13,814	32,68,211	1·82	441	44·74
1913-14 . . .	1,031·73	18,26,82,343	2,26,70,849	1,04,31,713	5·71	423	53·93
1914-15 . . .	1,031·73	18,59,51,863	2,33,73,105	1,10,00,466	5·92	436	52·94
1915-16 . . .	1,047·59	18,63,26,872	2,58,28,354	1,26,37,710	6·78	481	51·07
1916-17 . . .	1,047·61	18,80,59,395	2,98,17,094	1,50,86,189	8·02	547	49·40
1917-18 . . .	1,031·73	18,95,62,451	3,33,04,492	1,83,63,449	9·69	616	44·86
1918-19 . . .	1,031·73	19,08,80,139	3,49,03,149	1,88,14,745	9·86	651	46·09
1919-20 . . .	1,031·73	19,88,36,327	3,67,17,729	1,65,94,634	8·35	684	54·80
1920-21 . . .	1,047·41	23,68,36,000*	3,70,62,987	1,32,61,460	5·60	686	64·22
1921-22 . . .	1,040·65	24,42,11,918*	3,84,11,062	1,16,12,682	4·76	705	69·77
1922-23 . . .	1,040·65	24,88,30,929*	4,30,02,428	1,60,03,178	6·43	790	62·79
1923-24 . . .	1,040·65	31,97,15,157*	4,31,24,272	1,91,55,788	5·99	792	55·58
1924-25 . . .	1,040·65	32,33,83,416*	4,61,64,095	2,11,10,481	6·53	851	54·27
1925-26 . . .	1,040·65	33,16,11,094*	4,84,96,444	2,14,77,449	6·48	888	55·70
1926-27 . . .	1,041·09	34,85,35,431*	4,76,90,739	2,14,09,476	6·14	873	55·10
1927-28 . . .	1,042·99	26,46,10,984*	5,10,44,393	2,16,38,469	8·18	930	57·61
1928-29 . . .	1,090·15	27,44,20,230*	5,34,62,622	2,62,65,343	9·57	935	50·87
1929-30 . . .	1,117·90	28,61,24,914*	5,25,59,008	2,52,05,843	8·81	896	52·04
1930-31 . . .	1,119·02	29,15,52,944	4,66,98,908	2,05,89,325	7·06	803	55·92
1931-32 . .	1,118·80	33,57,82,102	4,42,78,177	2,06,66,664	6·15	761	53·33
1932-33 . . .	1,118·80	33,58,96,373	4,14,72,228	1,98,66,566	5·91	713	52·10
1933-34 . . .	1,118·80	35,38,73,875	4,31,45,569	1,85,95,464	5·25	742	56·90
1934-35 . . .	1,119·10	35,45,37,580	4,26,74,283	1,68,70,786	4·76	733	60·47
1935-36 . . .	1,119·10	33,44,10,419	4,19,65,813	1,62,57,847	4·86	721	61·26
1936-37 . . .	1,119·10	33,42,33,122	4,30,35,659	1,64,83,831	4·93	740	61·70
1937-38 . . .	1,119·10	33,37,12,869	4,44,67,040	1,65,87,866	4·97	764	62·70
1938-39 . . .	1,119·10	33,02,43,653	4,59,85,233	1,72,26,144	5·22	790	62·54

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(b) Kolar Gold-fields railway (5′ 6″ gauge)—

The railway was constructed by the Mysore Durbar in order to provide facilities for the gold-fields.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bowringpet to Marikuppam	1-6-94	9·88	9·88

Details of construction—

Permanent-way.—The line is laid with 76-lb. bull-headed and 75-lb. double-headed steel rails on cast iron pot sleepers.

Ballast.—The line is ballasted with stone and sand, chiefly the former.

Fencing.—The line is fenced throughout.

Curves.—The sharpest curve is of 2,200 feet radius.

Gradients.—The ruling gradient is 1 in 66·66.

Agreement and contract—

Agreement, dated the 1st July 1902, *between the Mysore Government and the former Madras Railway Company*, as to working and maintenance, with effect from 1st January 1901.

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

Agreement, dated the 30th October 1925 (supplemental to that dated 1st July 1902), *between the Mysore Government and the Madras and Southern Mahratta Railway Company*, as to the variations of the terms laid down in the principal contract.

"Deed dated 24th March 1937 between the Secretary of State in Council of India and the M. & S. M. Railway Co., Ltd., for the continued working of the K. G. F. Railway by the Company".

Main provisions of agreement and contract—

(i) *Land.*—Provided by the Mysore Durbar at the cost of capital.

(ii) *Government aid.*—The line (which is the property of the Mysore Durbar) is maintained, stocked and worked by the Madras and Southern Mahratta Railway Company in all respects (except only as to capital expenditure which is provided by the Durbar) as part of their own undertaking.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } Maintenance and working expenses are calculated at the same proportion of the gross earnings of the Branch as obtains on the Company's system as a whole, including the Branch. But in the case of accident or damage caused by extraordinary casualty, *e.g.*, by floods, each party bears its own cost of repairs, such cost being eliminated from the Company's revenue account before the percentage of working expenses referred to above is arrived at. The Company works the Branch for the maintenance and working expenses as above, *plus* cost of new minor works and 5 per cent. of the gross earnings of the Branch for the use of rolling-stock, *plus* the amount due by the Branch for use of the joint station at Bowringpet. In addition the Company receives $\frac{1}{20}$th of the balance which remains after payment of interest on the capital expenditure of the Branch incurred after the 31st December 1907. Further, the Branch is liable to contribute to the Madras and Southern Mahratta Railway Provident Institution, upon terms and rules and regulations to be approved by the Secretary of State from time to time.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of—*
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Bullion and coin.— } The same as from time to time obtain on the Company's lines.

(vii) *Power of the Government to determine agreement.*—Nil.

(viii) *Power of the Government to determine contract.*—As in the case of Madras and Southern Mahratta railway (5′ 6″ gauge).

(ix) *Power of the Durbar to determine agreement.*—Subject to six months' notice expiring only on the 30th June or the 31st December of any year, after the 31st December 1937, up to which date the working of the line shall be left with the Company.

(x) *Power of the Durbar to determine contract.*—Nil.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*b*) Kolar Gold-fields railway (5′ 6″ gauge)—*concld.*

Main provisions of agreement and contract—*concld.*

(xi) *Power of the Company to determine agreement.*—Subject to six months' notice expiring only on the 30th June or the 31st December in any year; and also to withdraw from the agreement if sanction be accorded to the construction of a competing line to the gold-fields.

(xii) *Power of the Company to surrender contract.*—Nil.

(xiii) *Term of agreement.*—Not specified.

(xiv) *Term of contract.*—As in the case of Madras and Southern Mahratta railway (5′ 6″ gauge).

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings. *	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week	Proportion of expenses to earnings
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	9·88	12,08,566	1,73,840	65,189	5·39	338	62·50
1914-15	9·88	12,09,832	1,77,599	66,006	5·46	346	62·83
1915-16	9·88	12,09,192	1,71,811	70,145	5·80	334	59·17
1916-17	9·88	12,09,193	1,69,802	71,833	5·94	331	57·70
1917-18	9·88	12,12,706	1,71,628	79,971	6·59	334	53·40
1918-19	9·88	12,14,215	1,63,792	73,318	6·04	319	55·24
1919-20	9·88	12,23,809	1,70,682	65,996	5·39	332	61·33
1920-21	9·88	12,23,309	2,03,167	56,131	4·59	395	72·38
1921-22	9·88	12,25,248	2,02,524	47,685	3·89	394	76·45
1922-23	9·88	12,25,137	2,08,627	62,068	5·07	406	70·25
1923 24	9·88	12,25,289	1,82,760	65,878	5·38	356	63·95
1924-25	9·88	12,26,385	1,58,986	58,744	4·79	309	63·05
1925-26	9·88	12,26,632	1,65,524	61,009	4·97	321	63·10
1926-27	9·88	12,26,629	1,59,584	59,198	4·83	310	62·90
1927-28	9·88	12,26,629	1,61,866	54,860	4·47	313	66·11
1928-29	9·88	12,27,763	1,60,675	69,095	5·63	312	57·00
1929-30	9·88	12,52,244	1,66,760	65,760	5·25	324	60·57
1930-31	9·88	12,52,244	1,46,510	52,453	4·19	285	64·20
1931-32	9·88	12,51,995	1,62,236	65,875	5·26	316	59·39
1932-33	9·88	12,51,796	1,76,348	63,171	5·05	343	64·18
1933-34	9·88	12,51,974	1,75,172	65,813	5·27	341	62·43
1934-35	9·88	12,47,469	1,63,886	55,073	4·41	319	66·40
1935-36	9·88	12,47,469	1,73,902	55,532	4·45	338	68·07
1936-37	9·88	12,47,469	1,97,848	66,384	5·32	385	66·45
1937-38	9·88	12,47,454	2,13,889	45,116	3·62	416	78·91
1938-39	9·88	12,47,454	1,95,171	69,378	5·56	380	64·45

*Payable to Mysore Durbar as surplus profits.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(c) Tenali-Repalle railway (5′ 6″ gauge)—

The construction of this line by the Madras and Southern Mahratta Railway Company, at the cost of the District Board of Guntur, was sanctioned in Railway Board's Notification No. 110, dated the 9th April 1913.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tenali to Repalle	8-3-16	21·41	21·41

Details of construction -

Permanent-way.—The line is laid with 75-lb. flat-footed British standard steel rails on timber sleepers.

Ballast.—The line is ballasted with sand.

Fencing.—Only the station yards are fenced.

Curves.—The sharpest curve has a radius of 1,432 feet.

Gradients.—The ruling gradient is 1 in 150.

Agreement and Contract.—

"Agreement dated 14th December 1936 *between the Secretary of State for India in Council and the District Board of Guntur* for working the Tenali-Repalle Branch Railway through the Agency of the Madras and Southern Mahratta Railway Company.

(This agreement shall be deemed to have come into force from the 8th March 1916).

Deed dated 24th day of March 1937 *between the Secretary of State in Council of India and the Madras and Southern Mahratta Railway, Co., Ltd.*, for the continued working of the Company and State Lines.

"Agreement dated the 8th February 1938 between the Governor-General-in-Council and the Madras and Souther Mahratta Railway for working the Tenali-Repalli Branch Railway by the Company".

Main provision of agreement and contract.—

(*i*) *Land.*—Provided by the Government free of cost.

(*ii*) *Government aid.*—
(*iii*) *Terms of working*—
(*iv*) *Distribution of profits.*—

The line (which is the property of the District Board of Guntur) is maintained and worked as an integral part of the Company's system by the Madras and Southern Mahratta Railway Company, who provides the rolling stock and other appliances, etc., necessary thereunto.

For these services the Secretary of State is to receive half-yearly 50 per cent. of the gross earnings of the Branch, the balance, after meeting the cost of new minor works and any expenditure incurred on the Branch on account of extraordinary casualty such as bursting of dams, etc., being handed over to the District Board.

By way of rebate the Secretary of State is to pay in respect of and at the end of each financial year such a sum not exceeding in any year the net earnings (exclusive of earnings derived from the Carriage of revenue stores) from traffic inter-changed between the Company's Railway and the Branch as shall together with the aforesaid balance of gross earnings of the Branch make up an amount equal to interest at the rate of 3½ per cent. per annum on the Capital cost of the Branch. This undertaking shall be subject to the proviso that when the aforesaid balance of gross earnings of the Branch without the assistance of a rebate, suffices to pay interest at a rate exceeding 3½ per cent. on the capital cost of the Branch, the surplus shall be divided equally between the Secretary of State and the District Board.

(*v*) *Rates and fares.*—
(*vi*) *Special obligations as to the conveyance of.*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin.—

The same as from time to time obtain on the Madras and Southern Mahratta Railway.

(*vii*) *Power of the Government to determine agreement.*—The Secretary of State may give to the District Board notice in writing (which notice is herein referred to as notice of purchase) of his desire to determine the agreement either on the 31st day of March of the tenth year from the date of this agreement, *i.e.*, 14th December 1936 or on the 31st day of March in the last year of any subsequent period of ten years, such notice being given not less than 12 months prior to the 31st day of March mentioned therein as the day of determination and pay on such determination as purchase price a sum of money equal to 25 times the average yearly net earnings of three years preceding purchase subject to a maximum price of 120 per cent. of the total capital expenditure of the branch on a rupee basis and to a minimum price equal to the capital expenditure.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(c) Tenali-Repalle railway (5′ 6″ guage)—*concld.*

Main provisions of agreement and contract—*concld.*

The Secretary of State may also at any time give to the District Board notice in writing (which notice is herein referred to as notice of special purchase) of his desire to determine the agreement on any date mentioned therein for any one or more of the following reasons :—

(*a*) that the Secretary of State considers it desirable that the gauge of the said Branch should be altered ;

(*b*) that it is desired to convert the branch line into a line of through communication ;

(*c*) that the Secretary of State desires to extend the said Branch and that (if such be the case) the District Board has not within six months from the date of a formal requisition from the Secretary of State requiring it to raise and provide the capital necessary for the construction of the extension raised or provided such additional capital—

and pay in rupee currency on the determination of the agreement, which shall take place at the expiration of twelve months from the date of such notice, as purchase price a sum of money equal to 25 times the average yearly net earnings for the three years preceding purchase or an amount equal to 115 per cent. of the total capital expenditure of the Branch, whichever is the greater.

(*viii*) *Power of the Government to determine contract.*—As in the case of Madras and Southern Mahratta Railway (5′ 6″ gauge).

(*ix*) *Power of the Guntur District Board to determine agreement.*—
(*x*) *Power of the Guntur District Board to determine contract.*—
(*xi*) *Power of the Company to determine agreement.*—
(*xii*) *Power of the Company to surrender contract.*— } *Nil.*

NOTE.—The Company can terminate the working contract on the 31st day of March in any year on giving not less than twelve months' previous notice in writing.

(*xiii*) *Term of agreement* [*if not determined under* (*vii*)].—Not specified.

(*xiv*) *Term of contract* [*if not determined under* (*viii*)].—As noted under Madras and Southern Mahratta Railway (5′-6″ gauge).

Statistics of working—

Year	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1915-16	21·09	12,14,651	3,169	1,585	0·13	75	50·00
1916-17	21·50	14,24,906	1,06,811	53,405	3·75	96	50·00
1917-18	21·50	14,85,815	1,09,583	54,792	3·69	98	50·00
1918-19	21·50	14,84,998	1,01,601	50,801	3·42	91	50·00
1919-20	21·50	14,88,245	1,20,781	60,390	4·06	108	50·00
1920-21	21·41	14,86,938	1,40,672	70,336	4·73	126	50·00
1921-22	21·41	14,86,938	1,54,561	77,252	5·20	139	50·00
1922-23	21·41	14,94,195	1,98,124	99,062	6·63	178	50·00
1923-24	21·41	15,12,254	2,09,516	1,04,758	6·93	188	50·00
1924-25	21·41	15,29,222	2,39,416	1,19.708	7·83	214	50·00
1925-26	21·41	15,33,546	2,42,641	—28,345	—1·85	217	111·70
1926-27	21·41	15,46,464	2,67,240	93,737	6·06	239	64·90
1927-28	21·41	15,53,989	2,76,466	95,952	6·17	247	65·29
1928-29	21·41	15,62,878	2,70,870	94,975	6·08	243	64·93
1929-30	21·41	15,76,375	2,77,172	96,738	6·14	248	65·10
1930-31	21·41	15,88,714	2,49,280	89,953	5·66	224	63·91
1931-32	21·41	15,93,421	1,88,212	74,897	4·70	169	60·21
1932-33	21·41	15,96,679	1,96,020	76,919	4·82	176	60·76
1933-34	21·41	15,96,679	1,79,662	72,858	4·57	161	59·45
1934-35	21·41	15,96,679	1,89,127	75,223	4·71	170	60·22
1935-36	21·41	15,97,148	1,98,600	77,597	4·86	178	60·93
1936-37	21·41	15,98,514	2,03,177	78,756	4·93	182	61·24
1937-38	21.41	15,98,918	2,16,152	82,016	5.13	194	62.06
1938-39	21.41	15,98,918	2,30,419	85,586	5.35	207	62.86

(d) Madras and Southern Mahratta railway (3′ 3⅜″ gauge)—

The Madras and Southern Mahratta 3′ 3⅜″ gauge railway is the former Southern Mahratta railway in amalgamation with the sections (Pakala to Dharmavaram and Katpadi to Gudur) of the South Indian railway taken over, and the lines formerly known as the Bellary-Rayadrug, Hospet-Kottur and Guntakal-Mysore Frontier railways.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*d*) Madras and Southern Mahratta railway (3′ 3⅜″ gauge)—*contd.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Frontier to Castle Rock	3-2-88	3·63			
Castle Rock to Deuli	15-6-87	2·75			
Deuli to Dharwar	24-1-87	56·00			
Dharwar to Hospet	1-7-85	101·27			
Hospet to Bellary	24-3-84	40·51			
Bellary to Guntakal*	16-5-87	30·10			* This section, which was opened throughout in 1871 as a 5′ 6″ gauge branch of the former Madras railway was made over to the former Southern Mahratta Railway Company on 1st February 1887 and converted to 3′ 3⅜″ gauge on the 16th May 1887.
Guntakal to Nandyal	11-7-87	90·79			
Nandyal to Cumbum	15-6-90	63·18			
Cumbum to Tadepalli	3-10-89	122·41			
Tadepalli to Bezwada	..	2·97	513·61		
Branches—					
Harihar branch—					
Hubli to Harhar	18-10-86	80·79	80·79		
Bijapur branch—					
Gadag to Hotgi	1-8-84	173·08			
Hotgi to Sholapur	15-5-27	9·25	182·33		
Poona branch—					
Londa to Belgaum	21-3-87	31·80			
Belgaum to Miraj	22-12-87	85·88			
Miraj to Koregaon	2-5-87	76·00			
Koregaon to Ghorpuri	18-11-86	83·07			
Ghorpuri to Poona	4-10-90	0·91	277·66		
Guntakal Mysore Frontier branch—					
Guntakal to Dharmavaram	1-3-92	63·15			
Dharmavaram to Hindupur	23-4-93	49·28			
Hindupur to Mysore Frontier	17-7-93	7·27	119·70		
Bellary-Rayadrug branch—					
Bellary to Rayadrug	1-7-05	33·35	33·35		
Hospet-Kottur branch—					
Hospet to Kottur	1-4-05	43·16			
Gunda Road to Nagalapuram	1-12-06	†3·43			† The decrease is due to dismantlement between Nagalpuram and Ramanamalai branch on 31-3-1936.
Nagalapuram to Ramandrug	24-5-09	2·84			
Ramandrug to Kanivihalli	1-10-10	6·79			
Kanivihalli to Swamihalli	3-3-28	11·74	67·96		
Guntur Macherla Branch—					
Guntur to Macherla	15-1-30	79·83	79·83		
Bezwada Masulipatam Branch‡—					‡Purchased by the Government on on 4th February 1938 from the District Board of Kistna.
Bezwada to Masulipatam	4-2-08	49·47			
Masulipatam to Masulipatam Port (Tidal lock).	1-1-99	2·33	51·80		
Gudivada Bhimavaram Branch—					
Godivada to Bhimavaram	17-9-28	40·60	40·60		
Katpadi-Dharmavaram branch—					
Katpadi to Pakala	18-3-91	39·48			
Pakala to Vayalapad	1-1-92	46·69			
Vayalapad to Dharmavaram	20-3-92	94·14	180·31		
Pakala-Gudur branch—					
Pakala to Tirupati West	18-3-91	25·05			
Tirupati West to Gudur	15-9-87	59·05	84·10		
Dronachellam Karnool Railway—					
(At Dronachellam)	1-1-09	0·09	0·09		
GRAND TOTAL	..	..	..	1,712·13	
Double Line					
Poona-Ghorpuri	2-3-34	1·15	1.15		

Details of construction—

Permanent-way.—The rails in use are of 41½-lb., 50-lbs., 60-lbs. 62-lbs. and 75-lbs. (II hand) flat-footed steel. The sleepers are teak, sâl, jamba, pine and Australian eucalyptus and steel trough.

Ballast.—The line is ballasted with stone, gravel, sand and moorum.

Fencing.—The lines from Hospet to Kottur, Bellary to Rayadrug, Hotgi to Sholapur and Kanivihalli to Swamihalli are unfenced, those from Pakala to Dharmavaram, Katpadi to Gudur and Bezwada to Masulipatam are fenced only at stations, and the rest are partially fenced.

Curves.—The sharpest curve is of 479 feet radius.

Gradients.—The ruling gradient is 1 in 100, except for a short length between Hospet and Papinayakanahalli where the gradient is 1 in 91·92, on the Braganza Ghats (between miles 0 and 3 on the main line) and between Gunda Road and Kanivihalli, where the gradient is 1 in 41, and on the sections between Hospet and Kottur. Bellary and Rayadrug and Kanivihalli to Swamihalli, where it is 1 in 60.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*d*) Madras and Southern Mahratta railway (3′ 3⅜″ gauge)—*concld.*

Contracts—

This line forms part of the Madras and Southern Mahratta projected railway within the meaning of the original contract of the 1st June 1882, as supplemented by the principal contract of the 26th June 1908, the main provisions of which are stated under Madras and Southern Mahratta railway (5′ 6″ gauge).

Statistics of working—

Note.—(*i*) The amount of sterling liabilities involved in the purchase of railways included in the figures shown in col. 3 below against 1933-34 and 1934-35, has been converted at the rates of exchange ruling at the time when the liabilities came into being as against the statutory rate of exchange, *i.e.*, 1*s.* 6*d.* previously adopted. From the year 1935-36 onwards, the same amount has been reconverted at the latter rate.

(*ii*) From the year 1936-37, the $\frac{\text{Net earnings}}{\text{Working expenses}}$ have been arrived at after taking into account the appropriation to Depreciation fund instead of actual expenditure on 'Replacements and Renewals' previously accounted for.

Includes the Madras and Southern Mahratta Railway (5′ 6″ gauge).

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction. *	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay, or capital at charge, given in column 3.	Interest.	Annuity.†	Company's share of surplus profits (based on terms of contract) attributable to each year.	Percentage of Company's share of net earnings (surplus profits *plus* guaranteed interest on the capital) on Company's capital.	Gain or loss to the State pertaining to each year.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs	Rs.	Rs.	Rs.	
1908 .	2,542·85	29,65,72,872	2,82,50,979	97,96,440	3·30	85,17,070	59,81,910	5,84,312	4·28	—52,86,852	214	65·32
1909 .	2,545.74	30,21,58,743	2,97,71,171	1,19,36,693	3·95	91,55,944	73,25,715	5,58,508	4·24	—51,03,474	225	59·91
1910 .	2,552·53	30,63,87,664	3,11,30,143	1,30,92,155	4·27	92,69,791	73,25,715	8,19,124	4·59	—43,22,475	235	57·94
1911 .	2,552·53	31,14,03,239	3,28,29,664	1,41.77,381	4·55	94,61,902	73,25,730	11,05,276	4·97	—37,15,527	247	56·92
1912 .	2,552·53	31,27,38,275	3,53,32,019	1,61,26,469	5·16	96,17,034	73,25,715	16,44,270	5·69	—24,60,550	266	54·36
1st qr. of 1913.	2,552·53	31,57,83,052	96,56,648	49,61,725	1·57	24,13,007	18,31,425	7,05,909	1·82	+11,384	291	48·62
1913-14	2.552·53	32,04,96,530	3,72,78,171	1,64,35,222	5·13	1,08,91,877	73,25,715	17,59,306	5·85	—35,41,666	281	55·91
1914-15	2,551·33	32,38,92,264	3,73,07,039	1,63,30,824	5·04	1,78,13,624	73,25,715	10,73,507	5·73	—44,82,022	281	56·23
1915-16	2,567·19	32,41,57,972	4,15,37,815	1,96,99,991	6·08	1,10,67,739	73,25,715	26,90,003	7·09	—13,83,466	313	52·57
1916-17	2,567·21	32,61,13,857	4,64,06,975	2,27,72,156	6·98	1,08,72,280	73,25,715	35,72,982	8·26	+10,01,179	348	50·62
1917-18	2,549·86	32,73,42,551	5,13,54,056	2,74,03,654	8·30	1,12,74,869	73,25,715	49,07,193	10·04	+39,55,874	386	46·51
1918-19	2,549·86	32,92,81,816	5,41,76,036	2,82,19,588	8·57	1,13,72,921	73,25,715	51,54,045	10·37	+43,66,907	409	47·92
1919-20	2,549·86	34,03,11,935	5,70,03,699	2,60,48,983	7·65	1,00,48,760	60,80,762	48,58,222	9·38	+50,61,236	430	54·39
1920-21	2,565·54	38,23,30,000	5,81,54,882	1,98,76,483	5·20	1,05,15,611	56,74,132	32,71,645	6·63	+4,15,095	437	65·02
1921-22	2,558·78	39,19,26,032	6,09,94,017	1,82,87,665	4·67	1,34,10,485	72,17,234	15,31,607	5·37	—38,71,661	457	70·24
1922-23	2,558·78	39,90,91,339	6,78,40,078	2,42,83,400	6·08	1,34,56,039	76,17,487	27,77,446	7·26	+4,32,428	509	64·80
1923-24	2,560·21	¶ 47,51,74,231	6,92,11,208	2,94,80,222	¶6·20	1,36,94,941	72,06,576	41,16,108	8·89	+44,62,897	519	53·2
1924-25	2,560·21	¶ 48,25,16,592	7,32,81,346	3,37,49,787	¶6·99	1,79,86,140	‡	56,50,373	10·70	+1,01,13,274	549	57·0
1925-26	2,560·21	¶ 49,52,96,732	7,61,64,127	3,28,92,104	¶6·64	1,84,21,831	..	54,38,740	10·34	+90,31,533	569	56·89
1926-27	2,560·65	¶ 51,07,14,637	7,55,72,687	3,40,81,434	¶6·67	1,89,11,713	..	54,60,284	10·40	+97,09,437	565	54·90
1927-28	2,583·54	44,06,46,446	2,09,82,512	3,37,09,065	7·65	2,05,78,801	..	48,14,376	9·54	+83,15,888	598	58·37
1928-29	2,671·93	45,69,79,304	8,62,26,695	4,37,01,879	9·56	2,14,62,965	..	74,09,199	13·00	+1,48,29,715	617	49·32
1929-30	2,779·83	47,51,64,792	8,38,90,929	3,96,33,611	8·34	2,18,58,839	..	61,39,138	11.30	+1,16,35,634	577	52·7
1930-31	2,780·95	48,33,76,187	7,44,16,673	3,13,48,051	6·49	2,32,95,643	..	40,06,126	8·45	+40,46,282	515	57·87
1931-32	2,780·58	53,10,62,794	7,14,44,256	3,18,25,922	5·99	2,38,32,515	..	41,31,679	8·62	+38,61,728	494	55·45
1932-33	2,780·59	53,14,31,359	6,70,62,516	2,91,75,134	5·49	2,38,12,221	..	31,44,627	7·30	+22,18,286	464	56·50
1933-34	2,780·59	55,06,91,745	6,97,28,394	3,07,19,865	5·58	2,36,74,418	..	36,31,098	7·95	+34,17,035	482	55·94
1934-35	2 780·93	55,20,23,558	6,78,22,900	2,75,04,369	4·98	2,32,13,050	..	26,76,613	6·68	+16,14,706	469	59·45
1935-36	2,779·43	53,26,73,179	6,62,84,629	2,52,21,777	4·73	2,29,00,733	..	19,38,601	5·70	+3,82,443	459	61·95
1936-37	2,779·43	5330,57, 183	6,72,55,280	2,46,37,618	4·62	2,25,09,642	..	23,95,810	6·31	—2,67,834	465	63·37
1937-38	2,831·23	53,62,08,577	6,88,87,327	2,35,35,634	4·39	2,24,82,595	..	18,13,652	5·53	—10,57,576	468	65·84
(*a*) 1938-39	2,831·23	53,28,24,988	7,26,28,385	2,59,27,844	4·87	2,32,79,117	..	10,17,703	4·47	+16,31,024	493	64·30

*Including the premia paid by Government in the purchase of the line. (For convenience the portion of the premia in connection with the purchase of the Madras Railway debitable to the South Indian Railway on account of the portion of Madras Railway amalgamated with the former is also included in these figures).

†For convenience the portions of annuity charges due to the purchase of the Madras Railway debitable to the South Indian Railway for portion of Madras Railway amalgamated with the latter have been included with these figures.

‡The capital account was permanently debited with the balance of capital liability outstanding on 31st March 1924 in respect of the purchase of Madras Railway under redemption by annuities and sinking Fund on which full interest is charged in column 7.

¶ Revised figures.

(*a*) Includes the figures of the Bezwada-Masulipatam Railway from 4th February 1938, as separate figures for that Branch line have not been maintained after that date.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(c) Alnavar-Dandeli (Provincial) railway (3′ 3⅜″ gauge)—

The construction of this line by the Madras and Southern Mahratta Railway Company, on behalf of the Government Forest Department, was sanctioned in Railway Board's Notification No. 825-P.—16, dated the 31st January 1918.

Progress in opening—

Section of railway. 1	Date of opening. 2	Miles. 3	Total. 4
Alnavar to Dandeli	1-2-19	19·12	19·12

Details of construction—

Permanent-way.—The line is laid with new 41½-lb. flat-footed British standard section steel rails on timber sleepers.

Ballast.—The line is ballasted with moorum and stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 636 feet.

Gradients.—The ruling gradient is 1 in 80.

Contracts—

Dated the 26th July 1928 between the Government of Bombay and the Madras and Southern Mahratta Railway Company.

The line is the property of Bombay Government. It was constructed and is being worked, for the carriage of timber for the Government Forest Department at a charge of Re. 1-8-0 per ton. The cost of working is borne by Bombay Government.

Main Provisions of Contract and Agreement—

(*i*) *Terms of working.*—

Bombay Government to pay.—

(1) actual cost under Abstract A,

(2) expenditure under other Abstracts, *viz.*, B, C, E, F and G at Rs. 2 per train mile of run over Alnavar Dandeli Railway and Re. 1 per mile for light engines run between Hubli and Alnavar for the purposes of Alnavar Dandeli Railway,

(3) Rs. 250 half-yearly for Joint Station expenses,

(4) interest and maintenance charges on works constructed for the sole use of the Railway within the Joint Station limits of Alnavar, (*Vide* clause 6 of the Agreement as amended by the Railway Board's letter No. 4754-F. of 23rd December 1936).

(5) a hire charge of 5 per cent. for interest and 1 per cent. for profit on the capital cost of all Rolling Stock belonging to the Madras and Southern Mahratta Railway available for traffic purposes,

(6) hire for the stock used on Ballast trains.

(7) Stock to be hired to the Branch line by the Company at the same rate that Foreign Railway charges the Company for its use and the maintenance of this hired stock to be undertaken by the Company as in the case of its own stock.

(8) The Company to be indemnified from loss by extraordinary damage to its own or hired Rolling Stock while on the Branch.

(9) Cost of works required at the Joint Station for the sole use of the Branch of which capital does not exceed Rs. 1,000 each to be debited to Government as well as 3 per cent. per annum for maintenance charges as per clause 7 of the terms of working.

(*ii*) *Rates and Fares.*—As approved by the Bombay Government.

(*iii*) *Term of contract.*—The agreement comes into force from 1st February 1919 and can be terminated by giving at least six months' notice by either side desiring to revise or cancel it.

(*iv*) *Compensation on termination of Contract.*—As determined by mutual agreement or if necessary by the Railway Board.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*e*) Alnavar-Dandeli (Provincial) railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, inlcuding suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1923-24	19·12	8,87,000	31,000	—20,000	..	31	164·67
1924-25	19·12	8,86,831	33,901	—7,597	..	34	122·41
1925-26	19·12	8,86,831	45,574	—8,326	..	46	118·20
1926-27	19·12	8,86,762	70,020	23,798	2·68	70	66·00
1927-28	19·12	8,86,762	53,277	3,398	0·38	53	93·62
1928-29	19·12	8,86,762	47,817	8,688	0·98	48	81·83
1929-30	19·12	8,86,762	40,938	—4,828	..	41	111·79
1930-31	19·12	8,86,762	43,069	—766	..	43	101·78
1931-32	19·12	8,86,762	40,848	—3,641	..	41	108·91
1932-33	19·12	8,86,762	47,401	6,988	0·79	48	85·26
1933-34	19·12	8,86,762	44,698	803	0·11	45	98·20
1934-35	19·12	8,86,762	41,624	—3,902	..	42	109·37
1935-36	19·12	8,86,762	35,561	—7,061	..	39	118·31
1936-37	19·12	8,86,762	26,483	—11,454	..	27	143·25
1937-38	19·12	8,86,762	88,419	46,493	5·24	89	47·42
1938-39	19·12	8,86,762	56,778	13,255	1·49	57	76·65

(*f*) Kolhapur State railway (3′ 3⅜″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Kolhapur to Miraj	21-4-91	29·27	29·27

Details of construction—

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on steel trough sleepers and wooden sleepers.

Ballast.—The line is ballasted throughout with sand.

Fencing.—The line is unfenced except for a very short length.

Curves.—There are no curves with a radius of less than 999 feet.

Gradient.—The ruling gradient is 1 in 100.

Agreement and contract—

Agreement, dated the 17th July 1891, *between the Kolhapur Durbar and the old Southern Mahratta Railway Company*, as to maintenance and working, having effect from 21st April 1891.

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

"Deed dated 24th March 1937 between the Secretary of State in Council of India and the M. & S. M., Railway Co., Ltd., for the continued working of the Kolhapur State Railway by the Company."

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*f*) Kolhapur State railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of agreement and contract—

(i) *Land.*—Provided by the Kolhapur Durbar at the cost of capital.

(ii) *Government aid.*—The line is the property of, and was constructed by, the Kolhapur Durbar who supply funds for any necessary additions thereto. It is maintained, stocked and worked by the Madras and Southern Mahratta Railway Company.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } From the total expenses of maintaining and working the Company's system, including the Kolhapur State railway, as a whole, are deducted charges for new minor works and Government supervision debitable direct to each of the railways concerned, and the balance is divided between the two railways in the ratio of the gross earnings of each.

From the gross earnings of the Kolhapur State railway are then deducted the charges for new minor works and the proportion of working expenses attributable to that line as noted above, and the remainder, represents its net earnings. Subject to Final Settlement when the accounts of each half year are finally made up, 80 per cent. of the net earnings of each month shall be paid by the company to the Darbar, the balance being retained pending half yearly settlement.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin.— } The same as, for the time being, are in force on the Madras and Southern Mahratta railway.

(vii) *Power of the Government to determine agreement.*—Not specified.

(viii) *Power of the Durbar to determine agreement.*—
(ix) *Power of the Company to determine agreement.*— } The agreement is terminable upon 6 months notice from either party to the agreement.

(x) *Power of the Government to determine contract.*—
(xi) *Power of the Company to determine contract.*— } As in the case of the Madras and Southern Mahratta railway (5′ 6″ gauge).

(xii) *Power of the Durbar to determine contract.*—Nil.

(xiii) *Term of agreement.*—As against (viii) and (ix).

(xiv) *Term of contract.*—As noted under the Madras and Southern Mahratta railway (5′ 6″ gauge).

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	29·27	23,26,251	3,41,236	1,53,844	6·61	224	54·92
1914-15	29·27	23,26,251	3,10,588	1,38,449	5·95	204	55·42
1915-16	29·27	23,26,251	3,24,162	1,56,223	6·72	213	51·81
1916-17	29·27	23,26,251	3,27,117	1,62,122	6·97	215	50·44
1917-18	29·27	23,26,251	3,64,304	1,96,042	8·43	239	46·09
1918-19	29·27	23,28,401	4,24,647	2,20,360	9·46	279	48·11
1919-20	29·27	23,28,398	4,32,924	1,97,789	8·49	284	54·31
1920-21	29·27	23,28,398	5,02,597	1,72,007	7·39	330	65·78
1921-22	29·27	23,28,398	5,22,420	1,58,113	6·79	343	69·78
1922-23	29·27	23,28,398	5,76,894	2,09,445	9·00	379	63·69
1923-24	29·27	23,28,944	5,97,246	2,57,374	11·05	392	56·90
1924-25	29·27	23,29,321	6,15,269	2,73,257	11·73	403	55·59
1925-26	29·27	23,43,141	6,24,003	2,85,656	12·20	409	54·20
1926-27	29·27	23,44,272	6,08,704	2,76,713	11·80	399	54·50
1927-28	29·27	23,49,513	6,32,237	2,68,313	11·42	413	57·56
1928-29	29·27	23,51,322	6,02,407	3,09,819	13·18	395	48·57
1929-30	29·27	23,57,899	5,37,678	2,56,846	10·89	352	52·23
1930-31	29·27	23,57,899	5,10,706	2,24,591	9·53	336	56·02
1931-32	29·27	23,60,047	4,74,072	2,28,778	9·69	311	51·74
1932-33	29·27	23,60,047	4,98,954	2,11,375	8·96	328	57·64
1933-34	29·27	23,60,047	5,25,663	2,40,481	10·20	345	54·25
1934-35	29·27	23,60,047	4,43,263	1,85,163	7·85	291	58·23
1935-36	29·27	23,60,047	4,16,530	1,65,346	7·01	274	60·30
1936-37	29·27	23,60,047	3,67,767	1,51,802	6·43	242	58.72
1937-38	29·27	23,60,263	3,96,284	1,70,318	7·22	260	57.02
1938-39	29·27	23,62,627	4,49,629	1,97,166	8·35	295	56.15

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*g*) Sangli State railway (3′ 3⅜″ gauge)—

Progress in opening—

Section of railway. 1	Date of opening 2	Miles. 3	Total. 4
Miraj Junction to Sangli	1-4-07	4·90	4·90

Details of construction—

Permanent-way.—The permanent-way consists of second-hand 41½-lb. flat-footed steel rails on teak sleepers.

Ballast.—Ballast is chiefly sand.

Fencing.—The line is not fully fenced, but only where necessary.

Curves.—The sharpest curve has a radius of 1,011 feet.

Gradients.—The ruling gradient is 1 in 80.

Agreements and contract—

Agreement, dated the 17th July 1907, *between the Sangli Durbar and the former Southern Mahratta Railway Company*, as to the construction of the Sangli State railway.

Agreement, dated the 17th July 1907, *between the Sangli Durbar and the former Southern Mahratta Railway Company*, as to the maintenance and working of the Sangli State railway.

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

"Deed dated 24-3-1937 between the Secretary of State in Council of India and the M. & S. M. Railway Co., Ltd., for the continued working of the Sangli State Railway by the Company".

Main provisions of agreements and contract—

(i) *Land.*—Provided by the Sangli Durbar free of cost.

(ii) *Government aid.*—The Sangli State railway was constructed by the former Southern Mahratta Railway Company from funds supplied by the Durbar, whose property it is and who will provide all further funds that may be necessary for new works chargeable to Capital. The Branch is maintained, stocked and worked by the Company.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } From the total expenses of maintaining and working the Company's system, including the Sangli State railway, as a whole, are deducted charges for new minor works and Government supervision debitable direct to each of the railways concerned, and the balance is divided between the two railways in the ratio of the gross earnings of each.

From the gross earnings of the Sangli State railway are then deducted the charges for new minor works and the proportion of working expenses attributable to the Branch as noted above, and the remainder, represents its net earnings. Subject to final settlement when the accounts of each half year are finally made up, 80 per cent. of the net earnings of each month shall be paid by the company to the State, the balance being retained pending half-yearly settlement.

(v) *Rates and fares.*—The Company shall charge such rates, fares and tolls as are within the schedule of Maxima and Minima rates sanctioned by Government from time to time for the Madras and Southern Mahratta railway and shall make such rules, conditions and arrangements, in respect of traffic on the railway as are now, or shall, from time to time be. in force on the Madras and Southern Mahratta railway.

(vi) *Special obligations as to the conveyance of—*
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin.— } The same as, for the time being, are in force on the Madras and Southern Mahratta railway.

(vii) *Power of the Government to determine agreement.*—Not specified.

(viii) *Power of the Durbar to determine agreement.*—
(ix) *Power of the Company to determine agreement.*— } The agreement is terminable at the end of any year upon 6 months' notice from either party to the agreement.

(x) *Term of agreement.*—As against (viii) and (ix).

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*g*) Sangli State railway (3′ 3⅜″ gauge)—*contd.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	4·90	1,77,787	39,860	17,956	10·10	156	54·95
1914-15	4·90	1,77,787	38,358	16,930	9·52	151	55·86
1915-16	4·90	1,77,787	42,265	20,379	11·46	166	55·78
1916-17	4·90	1,77,787	44,877	22,012	12·38	176	50·95
1917-18	4·90	1,82,649	49,231	25,019	13·70	193	49·18
1918-19	4·90	1,83,098	59,885	30,549	6·68	234	48·99
1919-20	4·90	1,83,770	64,632	29,819	16·23	254	53·86
1920-21	4·90	1,83,770	74,454	25,713	13·99	292	65·46
1921-22	4·90	1,83,770	70,155	21,046	11·45	275	70·00
1922-23	4·90	1,94,719	90,428	32,850	16·87	355	63·67
1923-24	4·90	1,97,068	78,600	34,042	17·27	309	56·74
1924-25	4·90	1,97,068	97,565	43,259	21·95	382	55·66
1925-26	4·90	1,97,068	84,172	38,527	19·50	329	54·20
1926-27	4·90	1,97,068	80,276	36,513	18·50	314	54·50
1927-28	4·90	1,97,068	90,207	38,288	19·43	352	57·56
1928-29	4·90	2,02,456	31,746	47,143	23·29	359	48·62
1929-30	4·90	2,04,194	76,385	36,574	17·91	299	52·12
1930-31	4·90	2,04,194	77,753	34,096	16·70	305	56·14
1931-32	4·90	2,04,314	80,312	38,506	18·84	315	52·05
1932-33	4·90	2,04,314	82,723	35,338	17·30	325	57·28
1933-34	4·90	2,04,314	81,769	37,352	18·00	321	54·32
1934-35	4·90	2,04,314	75,980	31,332	15·34	298	58·76
1935-36	4·90	2,04,314	70,637	27,916	13·66	277	60·48
1936-37	4·90	2,04,314	72,795	29,767	14·57	286	59·11
1937-38	4·90	2,04,314	72,602	29,829	14.60	285	58·91
1938-39	4·90	2,05,900	78,246	33,841	16·44	307	56·75

(*h*) West of India Portuguese railway (3′ 3⅜″ gauge)—

Chairman.—C. P. WHITCOMBE, Esq., M. Inst. C. E.

Secretary.—LEONARD G. BOUCHIER, Esq.

Office.—4, Coleman Street, London, E. C. 2.

The line was constructed with the object of connecting the British and Portuguese territories and of affording the Southern Mahratta country a harbour on the West Coast. The Southern Mahratta railway took over the working of the line as from the 1st July 1902.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Mormugao Harbour to Sonaulim	17-1-87	40·94	
Sonaulim to the Portuguese frontier	3-2-88	10·10	
TOTAL	..	..	51·04

Details of construction—

Permanent-way.—The permanent-way consists of 60-lb. flat-footed steel rails on creosoted pine, sâl, teak and jamba sleepers.

Ballast.—The line is ballasted throughout with laterite and bluestone.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 550 feet radius.

Gradients.—The ruling gradient is 1 in 100 with 1 in 40 on the Ghât section.

Contracts and agreements—

Contract, dated the 18th April 1881, *between the Portuguese Government and the West of India Portuguese Railway Company*, as to the construction of a harbour at the Port of Mormugao and a railway from Mormugao to the Portuguese Frontier.

Contract, dated the 19th December 1892, *between the Portuguese Government and the West of India Portuguese Railway Company*, providing for the guarantee of interest on the Company's capital in consequence of the cessation of the annual subsidy of Rs. 4,00,000, which was formerly paid by the British to the Portuguese Government and hypothecated by the latter to the Company.

Agreement, dated the 21st August 1902, *between the former Southern Mahratta Railway Company and the West of India Portuguese Railway Company*, as to the maintenance and working of the railway from Mormugao to the Portuguese Frontier and the harbour at the Port of Mormugao.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*h*) West of India Portuguese railway (3′ 3⅜″ gauge)—*contd.*

Contracts and agreements—*contd.*

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing contracts and agreement, subject to the variations and modifications thereof as therein set forth.

Agreement, dated the 6th February 1929, *between the Portuguese Government and the West of India Portuguese Railway Company* regarding the provision of moneys up to the sum of three hundred thousand pounds required for capital expenditure for developments and improvements of the Railway and Harbour constructed under the contract dated the 18th April 1881 rendered necessary by the increasing demands of traffic.

" Deed dated 24-3-1937 between the Secretary of State in Council of India and the Madras and Southern Mahratta Railway Co., Ltd., for the continued working of the West of India Portuguese Railway by the Company ".

" Agreement dated the 14th July 1937 between the Madras and Southern Mahratta Railway Company and the West of India Portuguese Ry. Company for the extension and variation of working agreement dated 21st August 1902 ".

Main provisions of contracts and agreements—

(i) *Land.*—Provided by the Portuguese Government free of cost to the West of India Portuguese Railway Company.

(ii) *Government aid.*—Guarantee by the Portuguese Government of interest in sterling at 5 per cent. per annum on £800,000, and at 6 per cent. per annum on any additional capital. The interest is secured (*a*) on any annual subsidy payable by the British or the British Indian Government to the Portuguese Government, and (*b*) on the Abkari (excise) duties levied in Goa. Any deficiency is, however, to be made up by the Portuguese Government from other sources.

The line, which is the property of the West of India Portuguese Railway Company, is maintained and worked by the Madras and Southern Mahratta Railway Company as part of the latter's undertaking, except as to further capital expenditure which is provided by the Portuguese Government.

Until final and complete repayment by the Portuguese Government of the sums advanced by the West of India Portuguese Company under the Agreement dated the 6th February 1929, the latter shall be credited with, and entitled to retain out of the net revenue, interest at the rate of 6 per cent. per annum on the outstanding amount of such advances.

Until the termination of the principal contract the Portuguese Government shall be entitled to be credited out of (but not exceeding) the balance of the net revenue of each year remaining after providing for the guaranteed interest for the year with interest at the rate of 6 per cent. per annum on all sums reimbursed by the Portuguese Government.

(iii) *Terms of working.—*
(iv) *Distribution of profits.—* } *As between the Madras and Southern Mahratta and West of India Portuguese Railway Companies' Railway* revenue expenses are in the first instance paid by the Madras and Southern Mahratta Railway Company. Separate half-yearly accounts are kept of the gross earnings respectively of the Madras and Southern Mahratta railway and the West of India Portuguese railway. The gross working expenses of the combined railways (excluding revenue expenditure on new minor works which is borne entirely by the railway—whether the Madras and Southern Mahratta or the West of India Portuguese—incurring it and is in either or both cases excluded from the joint working expenses, and interest payable by the Madras and Southern Mahratta Railwy Company on the capital cost of telegraph lines equipped and owned by the Government of India) are borne by the two Companies in the proportion of their respective gross earnings for each half-year.

As to *Harbour* receipts and expenses, a separate account is kept of all sources of revenue at the Port of Mormugao. The amount chargeable by the Madras and Southern Mahratta Railway Company for maintenance and working is actuals, including the expenses of ordinary executive Supervision *plus* *10 per cent. thereon for superior supervision subject to the proviso that if in the aggregate they (without the sanction of the West of India Portuguese railway) exceed the mean of the figures which represent the relation of such expenditure to receipts during the years 1895, 1896 and 1899, any such excess is to be annulled, or reduced as much as possible by a corresponding diminution in the charge for supervision.

"*With effect from 1st July 1937 the charge for supervision by the superior officers of the M. & S. M. Railway is 7½ per cent. on the Net earnings of the Port for each year".

If the harbour receipts of the Company in 1929 or in any subsequent year exceed the average of the three years (1926—1928), the Portuguese Government shall be entitled to be credited as a charge to revenue with the excess of such receipts above the said average up to (but not exceeding) a sum equal to fifteen per cent. of the net harbour receipts of such year.

NOTE.—At the desire of the Board of the West of India Portuguese Railway the Secretary of State has agreed to 80 per cent. of the net earnings of each month being paid to the Joint Representative in India as soon as the accounts of each month are completed, the balance being retained pending the half-yearly settlement (India Office letter No. P.W.-2962, dated the 27th December 1912).

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*h*) West of India Portuguese railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts and agreements—*contd.*

(v) *Distribution of profits as between the Portuguese Government and the West of India Portuguese Railway Company.*—The surplus profits in any year, after payment of the guaranteed interest for that year, are to be divided equally between the Portuguese Government and the West of India Portuguese Railway Company.

(vi) *Rates and fares.*—The maximum rates and fares to be fixed with the consent of the Portuguese Government, and not to exceed the maxima on the Great Indian Peninsula railway; they are also subject to the maxima and minima prescribed in the contracts between the Secretary of State for India and the Madras and Southern Mahratta Railway Company.

(vii) *Special obligations as to the conveyance of—*

(*a*) Mails, both British and Portuguese.—To be conveyed on the West of India Portuguese railway upon the terms of the Treaty of 1878.

(*b*) Portuguese Government troops, officials, and Government stores.—To be conveyed on the West of India Portuguese railway on the same conditions as on Indian State railways.

(viii) *Power of the Portuguese Government to determine contracts.*—The Portuguese Government may purchase the railway and all other works—

(*a*) at any time by giving six months' notice;

(*b*) at any time after the expiration of the first 30 years from the date of opening of the railway or any section thereof, by giving two years' notice.

In the first case the Portuguese Government must pay to the Company in London a sum in sterling not less than the amount actually expended by the Company on the railway and other works, with 10 per cent. added, and the value of the rolling-stock, machinery, station appliances and stores.

In the second case the price to be paid by the Portuguese Government is a sum in sterling equal to the amount of the value of all the shares, debentures and stock of the Company calculated according to the mean market value in London during the three years immediately preceding the expiration of the two years' notice (such sum not to be less than the amount actually expended by the Company on the railway and other works), *plus* the value of the rolling-stock, machinery, station appliances and stores.

At the expiration of the term of the contract [99 years, see (xii)], the line becomes the property of the Portuguese Government, but the rolling-stock, machinery, station appliances and stores, and any other moveable property or plant, have to be paid for at their fair value.

In the event of termination of principal contract otherwise than by efflux of time, the Portuguese Government shall be credited against any sums payable by it to the Company with and up to £270,000 to the extent that the aggregate of the amount of the sinking fund available for redemption of the Debenture Stock and the nominal amount (if any) of the Debenture Stock then previously redeemed shall be able to provide.

(ix) *Power of the West of India Portuguese Railway Company to surrender contract.*—The West of India Portuguese Railway Company may make over the railway and works to the Portuguese Government—

(*a*) in the event of failure on the part of the Portuguese Government to pay the guaranteed interest in full, by giving six months' notice;

(*b*) at any time after the expiration of the first 30 years from the date of opening of any section of the line without renewal of the Treaty of 1878, by giving two years' notice.

In the first case the West of India Portuguese Railway Company would be entitled to receive from the Portuguese Government, in sterling, the amount actually expended on the railway and works, with 10 per cent. added, and the value of the rolling-stock, machinery, station appliances and stores: in the second case, the same amount, less the additional 10 per cent. on the expenditure on the railway and works.

The W. I. P. Company shall in the event of termination of principal contract whether by efflux of time or otherwise, make over to the Portuguese Government all works, Rolling Stock station appliances, etc., carried out or supplied with the sum of £270,000 without calling upon the Portuguese Government to pay any further amounts on that account.

(x) *Power of the Madras and Southern Mahratta Railway Company to determine agreement.*—
(xi) *Power of the West of India Portuguese Railway Company to determine agreement.*— } Determinable by either party at the end of two years from the 1st July 1902 (the date on which it came into force) on 6 months' notice given, reckoned either from the 30th June or the 31st December next after the delivery of such notice.

Upon the determination of the agreement the Madras and Southern Mahratta Railway Company to surrender to the West of India Portuguese Railway Company the railway and harbour and their equipment, etc., and to pay to the latter all money held on account of the railway.

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(*h*) West of India Portuguese railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of contracts and agreements—*concld.*

(xii) *Term of contract* [*if not determined under* (ix), (x) *or* (xi)].—99 years from the date of opening of the line.

(xiii) *Term of agreement* [*if not determined under* (x) *or* (xi)]—The term of agreement is 5 years unless extended* with the consent of both the parties when the West of India Portuguese Railway Company have the right to resume the working of their line and Harbour.

* Since extended to 30th June 1937, *vide* Despatch from the Secretary of State. No. F-3403/32 (Financial), dated 15th June 1932. Since extended to 31st December 1945—*vide* clause I of the Memo of Agreement dated 14th July 1937 between the M. & S. M. Ry. Coy., and W. I. P. Ry. Coy.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1927 and in Appendix 1 to the Report for 1913-14.)—

Includes the Harbour works.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	51·10	1,87,62,134	11,76,901	5,24,123	2·84	443	55·47
1914-15	51·10	1,90,86,222	8,51,382	3,47,839	1·82	321	59·14
1915-16	51·10	1,93,40,101	7,94,409	3,28,905	1·69	299	58·59
1916-17	51·10	1,94,72,673	8,24,195	2,95,456	1·51	310	64·15
1917-18	51·10	1,94,46,771	7,71,769	2,88,314	1·48	290	62·64
1918-19	51·10	1,94,38,755	10,83,005	5,17,635	2·66	407	52·20
1919-20	51·10	1,94,41,499	9,86,519	3,88,770	1·99	372	65·03
1920-21	51·10	1,94,46,072	9,18,988	1,57,524	0·81	346	82·85
1921-22	51·10	1,94,39,684	10,71,851	1,94,943	1·00	404	81·80
1922-23	51·10	2,01,70,795	15,43,230	4,57,027	2·26	582	70·39
1923-24	51·10	2,01,74,263	15,66,684	5,99,729	2·97	587	61·71
1924-25	51·10	2,01,70,634	16,58,238	6,46,990	3·20	625	63·98
1925-26	51·10	2,01,72,816	18,88,269	8,05,435	3·99	712	57·34
1926-27	51·10	2,01,73,218	22,26,592	9,40,843	4·66	839	57·74
1927-28	51·10	2,01,76,595	26,28,686	11,70,756	5·80	991	55·46
1928-29	51·10	2,03,43,454	31,79,912	15,44,549	7·59	1,199	51·42
1929-30	51·10	2,05,51,804	33,00,308	14,16,649	6·89	1,239	57·08
1930-31	51·10	2,11,34,674	28,91,586	11,89,343	5·62	1,088	58·87
1931-32	51·10	2,15,68,157	27,09,402	11,15,495	5·17	1,020	58·83
1932-33	51·10	2,19,12,708	20,98,883	7,82,599	3·57	791	62·81
1933-34	51·04	2,20,89,697	30,41,834	13,24,530	5·99	1,146	56·45
1934-35	51·04	2,25,65,429	25,44,938	11,29,799	5·00	959	55·60
1935-36	51·04	2 26,19,058	21,11,832	8,31,316	3·67	796	60·63
1936-37	51·04	2,26,50,728	24,42,499	10,61,552	4·68	920	56·54
1937-38	51·04	2,27,94,063	20,97,880	8,39,347	3·68	790	59·99
1938-39	51·04	†2,30,48,036	27,94,615	11,44,369	4·96	1,053	59·05

	Rs.
† Original capital up to 31st December 1901, £1,349,038-2-5 @ 1*s.* 8*d.* per rupee	= 1,61,88,697
Expenditure by Portuguese Government on improvements of line and harbour up to 31st March 1939	= 68,59,339
Total	= 2,30,48,036

9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*contd.*

(i) Bezwada-Masulipatam railway (3′ 3⅜″ gauge)—

(This Railway was purchased by Government on the 4th February 1938 and since that date it is worked as an integral part of the M. & S. M. Railway metre gauge system.)

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bezwada to Masulipatam	4-2-08	49·47	
Masulipatam to Masulipatam Port (Tidal Lock)	1-1-09	2·33	
TOTAL .	..	..	51·80

Details of construction—

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails on teak sleepers.

Ballast.—The line is ballasted with stone and moorum.

Fencing.—The station yards only are fenced.

Curves.—The radius of the sharpest curve is 717 feet between Masulipatam and Tidal Lock.

Gradients.—The ruling gradient is 1 in 200.

Agreement and contract—

Agreement, dated the 4th February 1908, *between the District Board of Kistna and the Madras and Southern Mahratta Railway Company*, as to maintenance and working, having effect from the 4th February 1908, the date of opening of the Branch.

Contract, dated the 26th June 1908 (called the principal contract), *between the Secretary of State and the Madras and Southern Mahratta Railway Company*, as to the continuance of the existing agreement subject to the variations and modifications thereof as therein set forth.

Agreement, dated the 18th December 1914, *between the District Board of Kistna and the Madras and Southern Mahratta Railway Company*, as to the adoption of the Government financial year for preparation of accounts.

Deed dated the 24th day of March 1937, *between the Secretary of State in Council of India and the Madras and Southern Mahratta Railway Company Limited* (Preamable 8) as to the purchase of the Branch line by the Government on the 3rd day of February 1938.

Main provisions of agreement and contract—

(i) *Land.*—Provided by the Government free of cost.

(ii) *Government aid.*—
(iii) *Terms of working.*—
(iv) *Distribution of profits.*—
The line (which is the property of the District Board of Kistna) is maintained and worked as an integral part of the Company's system by the Madras and Southern Mahratta Railway Company, who provides the rolling-stock and other appliances, etc., necessary thereunto.

For these services the Company is to receive half-yearly 45 per cent. of the gross earnings of the Branch, the balance, after meeting the cost of new minor works, being handed over to the District Board.

By way of rebate the Company is to pay to the District Board, in respect of, and at the end of each year, such a sum not exceeding in any year 10 per cent. of the share attributable to the Company's system of the gross earnings from traffic (except stores) interchanged between the Company's system and the Branch railway as shall, together with the net earnings of the Branch for such year, make up an amount equal to interest for the year at the rate of 3½ per cent. on the actual expenditure charged in its capital account.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin.—
The same as from time to time obtain on the Madras and Southern Mahratta railway.

(vii) *Power of the Government to determine agreement.*—The Government may purchase the Branch line at the expiry of 30 years, or at subsequent periods of 10 years, on twelve months' notice given, at a price 25 times the yearly average net earnings (excluding rebate payments) of three years preceding the purchase, subject to a maximum price of 120 and a minimum of 100 per cent. of cost price on a rupee basis.

Note.—The Government having purchased the Branch Railway on the fourth day of February 1938 by determining the agreement for working the Branch line from the 3rd February 1938, the branch line is being worked from the 4th February 1938 as part of the M. & S. M. Railway undertaking.

(viii) *Power of the Government to determine contract.*—As in the case of Madras and Southern Mahratta railway (5′ 6″ gauge).

(ix) *Power of the Kistna District Board to determine agreement.*—
(x) *Power of the Kistna District Board to determine contract.*—
Nil.

(xi) *Power of the Company to determine agreement.*—
(xii) *Power of the Company to surrender contract.*—
Nil.

(xiii) *Term of agreement* [*if not determined under* (vii)].—Not specified.

(xiv) *Term of contract* [*if not determined under* (viii)].—As noted under Madras and Southern Mahratta Railway (5′ 6″ gauge).

MYSORE STATE RAILWAY SYSTEM.

REFERENCES.

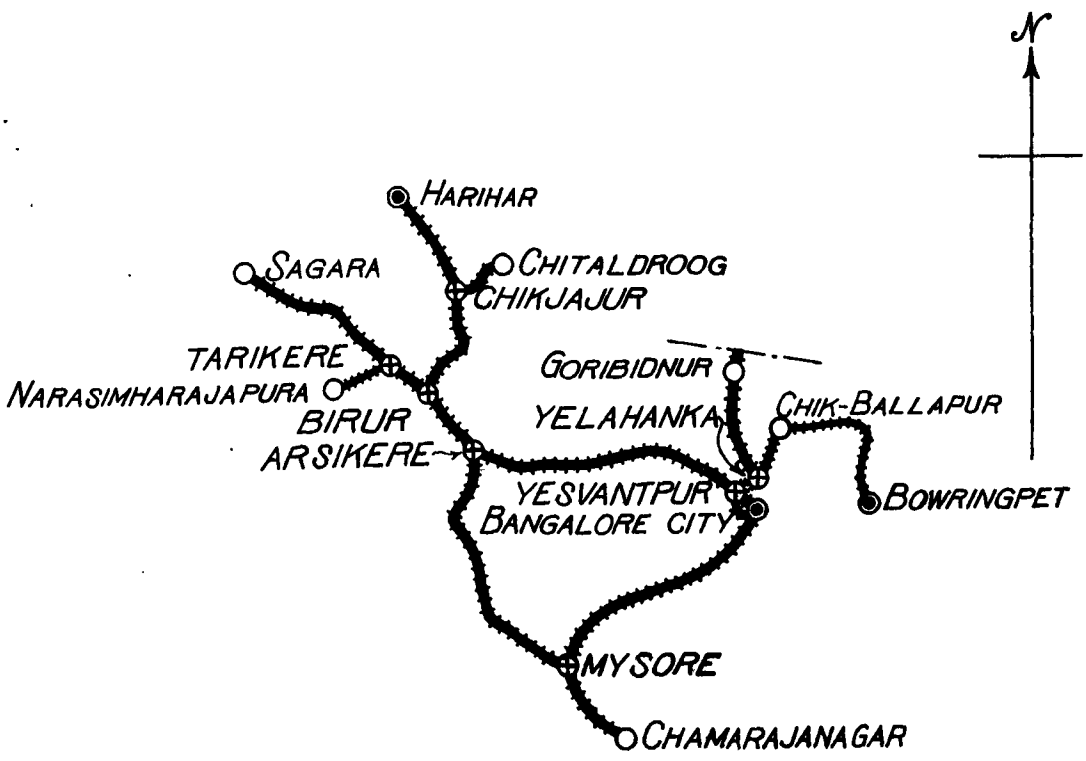
Mysore State Railway _____ MIXED GAUGE. 3'-3 3/8" 2'6" & 2'-0"

Home, Branch and Local line Junctions _____ ⊕ _____

Junctions connecting Foreign lines _____ ◉ _____

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.



9. MADRAS AND SOUTHERN MAHRATTA RAILWAY SYSTEM—*concld.*

(i) Bezwada-Masulipatam railway (3′ 3⅜″ gauge)—*contd.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908	49·47	20,02,813	2,72,333	1,49,783	7·48	117	45·00
1909	51·80	21,24,465	3,29,527	1,80,804	8·51	122	45·13
1910	51·80	21,56,748	3,07,417	1,66,821	7·73	114	45·73
1911	51·80	21,82,641	2,89,551	1,57,954	7·24	107	45·45
1912	51·80	21,98,743	3,31,267	1,81,732	8·27	123	45·10
1st qr. of 1913	51·80	21,99,608	94,771	52,124	2·37	141	45·04
1913-14	51·80	22,04,271	3,53,514	1,94,187	8·81	131	45·07
1914-15	51·80	22,03,935	4,06,330	2,23,174	10·13	151	45·08
1915-16	51·80	22,08,193	4,18,796	2,29,699	10·40	155	45·15
1916-17	51·80	22,15,270	3,82,717	2,09,320	9·45	142	45·31
1917-18	51·80	22,28,919	3,71,780	2,03,920	9·15	138	45·15
1918-19	51·80	22,46,472	3,80,477	2,09,237	9·31	141	45·01
1919-20	51·80	22,52,834	4,79,357	2,63,416	11·69	178	45·00
1920-21	51·80	22,55,146	5,70,222	3,13,622	13·91	212	45·00
1921-22	51·80	22,57,377	6,69,397	3,68,168	16·31	249	45·00
1922-23	51·80	22,71,099	7,98,859	4,38,993	19·33	297	45·05
1923-24	51·80	22,87,503	8,24,848	4,53,667	19·83	306	45·00
1924-25	51·80	22,96,887	8,75,147	4,80,291	20·91	324	45·12
1925-26	51·80	23,05,597	8,73,120	4,79,929	20·80	323	45·00
1926-27	51·80	23,30,345	9,60,663	5,28,150	22·70	356	45·00
1927-28	51·80	23,34,995	10,02,756	5,51,453	23·62	370	45·01
1928-29	51·80	23,41,823	9,58,248	5,27,036	22·51	355	45·00
1929-30	51·80	23,63,131	9,81,290	5,39,230	22·82	363	45·05
1930-31	51·80	23,95,819	8,80,143	4,83,169	20·17	327	45·06
1931-32	51·80	24,21,172	7,19,168	3,95,397	16·33	267	45·02
1932-33	51·80	24,23,461	7,36,080	4,04,844	16·71	273	45·00
1933-34	51·80	24,23,732	8,93,212	4,91,055	20·20	331	45.02
1934-35	51·80	24,23,732	7,00,317	3,85,174	15·89	260	45·00
1935-36	51·80	24,74,664	8,93,469	4,91,294	19·85	332	45·01
1936-37	51·80	25,15,853	13,04,299	7,17,206	28·51	484	45·01
1937-38	51.80	25,38,056	9,80,209	5,38,754	21·22	364	45·04

Worked as an integral part of the M. & S. M. Railway Metre guage System from 4th February 1938 and further information included therein.

10. MYSORE STATE RAILWAYS SYSTEM.

The Mysore State Railways System is made up of—

	Open lines.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Mysore State Railway (3′—3-3/8″ gauge)	599·91	9·43	609·34
(*b*) Bangalore Chik Ballapur Light Railway (2′—6″ gauge)	38·63	..	38·63
(*c*) Kolar District Railway (2′—6″ gauge)	63·57	..	63·57
(*d*) Tarikere, Narasimaharajapura Tramway (2′—0″ gauge)	26·60	..	26·60
Total	728·71	9·43	738·14
(*e*) Tadase Hebbe Tramway (2′—0″ gauge) [open for goods (Forest) Traffic only]	9·60	..	9·60

(*a*) Mysore State Railways (3′ 3⅜″ gauge).—

These lines are the property of the Government of His Highness the Maharaja of Mysore. Of the nine sections, the Bangalore-Mysore, Mysore-Nanjangud, Birur Shimoga, Bangalore-Harihar and Yesvantpur-Hindupur Sections were maintained and worked by the Madras and Southern Mahratta Railway Company as part of its undertaking. The Bangalore-Mysore, Mysore-Nanjangud and Birur-Shimoga Sections were taken over by the Mysore Government with effect from 1st October 1919 and the Bangalore-Harihar and Yesvantpur-Hind upur Sections from 1st January 1938 to be maintained and worked as one concern in conjunction with other Metre gauge sections.

10. MYSORE STATE RAILWAYS SYSTEM—*contd.*

(*a*) **Mysore State Railways** (3′ 3⅜″ gauge)—*contd.*

The Nanjangud-Chamarajanagar Railway has been constructed from funds provided by the Mysore District Board.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total	Remarks.
1	2	3	4	5
Bangalore extension—				
Mysore to Mandya	25-2-82	27·95		
Mandya to Channapatna	20-3-81	23·31		
Channapatna to Bangalore	1-2-81	34·75		
			86·01	
Nanjangud extension—				
Mysore to Nanjangud	1-12-91	15·04		
Nanjangud to Nanjangud town	12-7-99	0·76		
			15·80	
Arsikere extension—				
Mysore to Arsikere	3-1-18	102·95		
			102·95	
Birur-Shimoga section—				
Birur to Shimoga	1-12-99	37·74		
			37·74	
Chickjajur-Chitaldrug section—				
Chickjajur to Chitaldrug	5-1-21	20·90		
			20·90	
**Bangalore-Harihar Section—*				
Bangalore-Tumkur	11-8-84	42·73		
Tumkur-Gubbi	26-12-84	11·00		
Gubbi-Birur	12-8-89	76·57		
Birur-Harihar	21-2-89	80·19		
			210·49	
**Hindupur (Yesvantpur-Mysore Frontier) Section—*				
Yeswantpur-Dodballapur	15-12-92	20·20		
Dodballapur-Mysore Frontier	17-9-93	30·99		
			†51·19	
Nanjangud-Chamarajanagar section—				
Nanjangad to Chamarajanagar	27-8-26	22·29		
			22·29	
Shimoga-Sagara extension—				
Shimoga to Shimoga Town	31-1-29	1·34		
Shimoga Town to Ragihosahalli	12-4-30	17·62		
Ragihosahalli to Arasalu	25-5-31	7·66		
Arasalu to Anandapuram	30-4-34	9·59		
Anandapuram to Sagara	11-3-38	16·33		
			52·54	
TOTAL OPEN MILEAGE		..	599·91	
Under construction or sanctioned for construction—				
Sagara to Talaguppe (sanctioned on 16th June 1938)	..	9·43		
			9·43	
GRAND TOTAL		..	609·34	

*These sections were taken over by the Mysore State Railways from the M. & S. M. Rly. Co. from 1st Jan. 1938.

†Of this 6·85 miles (between Yeswantpur and Yelahanka) are on a mixed gauge (3′—3·3/8″ and 2′—6″).

Permanent-way.—The permanent-way consists of 60-lb. F. F. B. S. steel rails on Bangalore-Harihar Section and 60-lb. R. Section F. F. Steel rails on Yesvantpur Mysore Frontier Section except the ghat Section where 50-lbs. F. F. Steel State Railway type rails are laid with 41¼-lb. section track for a length of about one-fifth of a mile in Maklidrug stationyard, flat-footed steel rails 60-lb. per yard on the Bangalore extension, 41¼-lb. per yard, on the Nanjangud extension and 50-lb. per yard, on the Arsikere, Birur-Shimoga section, and Shimoga-Arasalu extensions and new and second hand 41¼-lb. on the Chickjajur-Chitaldrug laid on sleepers of Mysore teak and select junglewood varieties with a small proportion of steel trough sleepers. On the Nanjangud Chamarajanagar section the permanent-way consists of selected second hand 41¼-lb. steel flat-footed B. S. S. rails laid on half-round Mysore teak sleepers.

Ballast.—The line is ballasted with stone, moorum, gravel or sand. Approaches to bridges and most of the cuttings on the Arsikere extension are ballasted with stone and the banks with good gravel and moorum.

Fencing.—The Harihar, Hindupur, Bangalore, Nanjangud and Arsikere extensions are partially fenced and the Chickjajur Chitaldrug, Birur-Shimoga, Shimoga-Arasalu extension and Nanjangud-Chamarajanagar section (except for a very short length) are unfenced.

Curves.—The sharpest curve is of 515 feet radius.

Gradients.—The ruling gradient is 1 in 100 on Bangalore-Harihar and Yesvantpur-Mysore Frontier sections except in the Ghat Section where it is 1 in 89, 1 in 70 on the Bangalore extension, 1 in 89 on the Nanjangud extension and Birur-Shimoga section, 1 in 95 on the Arsikere extension and 1 in 100 on the Chickjajur Chitaldrug and Nanjangud-Chamarajanagar sections and Shimoga-Arasalu extension.

Agreement—All the above sections are owned and worked by the Mysore Government with the exception of Nanjangud-Chamarajanagar section which is owned by the Mysore District Board. This line is being maintained and worked under the terms of an agreement, dated the 4th December 1931.

10. MYSORE STATE RAILWAYS SYSTEM—*contd.*

(*a*) **Mysore State Railways** (3′ 3⅜″gauge)—*concld.*

Main provisions of agreement—*concld.*

Land.—Provided by Government free of cost.

Government Aid.—The Government guarantee repayment of the loan of eight lakhs of rupees on the conditions set forth in Government Order No. L. 4998-5001—L. B. 129-20-8, dated 3rd/4th January, 1924, which shall be read as forming part of this contract. The said guarantee shall cease and determine on the expiry of 15 years commencing from the date of opening of the Railway line.

Terms of working and distribution of profits.—The Government shall receive 65 per cent. of the gross earnings of the Railway in addition to 5 per cent. of the same for the use of the Rolling Stock, the balance after meeting the cost of New Minor Works, if any, and Telegraph charges referred to in Clauses 9 and 10, being handed over to the Board every month after the accounts are passed by the Auditor on behalf of Government.

The above percentage may, however, be modified by mutual agreement after a period of 5 years from the date hereof.

Rates and Fares.—The Government shall adopt a similar classification to that in force on the Mysore Railways and shall charge generally such tolls, rates and fares through and local and terminals as are in force on the Mysore Railways, but within the approved schedule of maxima and minima rates.

Special obligations as to the conveyance of :—

(*a*) Mails, Troops, Police, High Government officials and Government stores.

(*b*) Government bullion and coin and persons in charge thereof.

(*c*) Any special service that the Government may require for any of their own departments or for the departments of the Government of India shall be performed under the same conditions as may, for the time being, be in force on State owned and worked Railways.

Powers of Government to determine Agreement.—Governmant shall have power to purchase the Railway at any time after giving twelve months' notice in any of the following cases :—

(*a*) When the Government consider it desirable that the gauge of the line should be altered and the Board be unwilling to alter it, or

(*b*) when it is desired to convert the line into a line of through communication ; or

(*c*) when the Government desire to extend the line (without altering the gauge or, making the line part of a through route) and the Board unable or unwilling to supply the capital for such extension.

In the event of the line being purchased under this clause, the price payable shall be 25 times the average net earnings during the three years preceding the purchase or 155 per cent. of the Board's share of the capital expenditure on the line, whichever may be the greater.

Arbitration.—In every case in which any difference shall arise between the Government and the Board touching :—

(*a*) the true intent or construction of this agreement, or

(*b*) anything to be done suffered or permitted in pursuance of this agreement, or

(*c*) any of the incidents or consequences of this agreement, or

(*d*) any claim relating to any liability, damages, loss, costs or expenses, or

(*e*) any claim relating to the premises or any clause, matter or thing therein contained,

the matter in difference shall be referred to and determined by a Committee of five members, two of whom shall be nominated by the Government, two by the Board and the fifth by the other four and the decision of the said Committee, shall, if unanimous, be final and conclusive between the parties. If the decision, is not unanimous, the order of Government on such matters on which there is difference of opinion among the Members of the Committee shall be final and conclusive.

Statistics of working—

Year	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1917-18 .	102·95	81,35,574	65,817	6,582	0·08	52	90 00
1918-19 . .	102 95	91,95,094	3,80,815	18,599	0·20	71	95 12
1919-20 . .	242·70	1,87,82,252	13,40,703	4,75,651	2·55	106	64·52
1920-21 . .	242·70	2,03,82,920	23,25,450	6,27,003	3·08	184	73·04
1921-22 . .	263·60	2,22,76,798	24,87,211	2,99,288	1·34	181	87·96
1922-23 . .	263·60	2,29,21,401	27,48,704	2,82,740	1·23	201	89·71
1923-24 . .	263·60	2,31,52,305	26,30,832	—81,200	..	192	103·09
1924-25 . .	263·60	2,55,93,400	29,23,447	2,73,977	1·07	213	90·63
1925-26 . .	263·60	2,61,70,260	29,37,244	5,50,968	2·11	213	81·18
1926 27	285·89	2,60,14,164	30,09,042	7,22,706	2·78	202	75·98
1927-28 . .	285·89	2,70,67,535	32,71,371	8,83,389	3·26	220	73·00
1928-29 . .	287·23	2,84,99,904	32,11,063	13,09,705	4·60	215	59·21
1929-30 . .	287·23	3,04,74,949	34,05,540	5,70,000	1·87	228	83·26
1930-31 . .	304·85	3,12,71,529	30,13,242	5,83,729	1·87	190	80·63
1931-32 . .	312·33	3,16,64,000	28,13,000	6,12,000	1·93	173	78·24
1932-33 . .	312·33	3,20,24,000	27,98,000	3,13,000	0·98	172	88·81
1933-34 . .	312·33	3,26,25,000	28,71,000	3,38,000	1·04	176	88·23
1934-35 . .	321·90	3,31,98,000	28,36,000	2,63,000	0·79	169	90·73
1935-36 . .	321·90	3,38,66,000	29,14,000	4,21,000	1·24	173	85·55
1936-37 . .	321·90	3,48,34,000	29,96,000	4,95,000	1·42	178	83·48
1937-38 . .	338·23	3,59,09,000	31,23,000	6,12,000	1·70	177	80·00
1938-39 . .	599·91	5,91,36,000	72,65,000	21,41,000	3·62	232	70·53

10. MYSORE STATE RAILWAYS SYSTEM—*contd.*

(*b*) Bangalore-Chik Ballapur Light Railway (2′ 6″ gauge)—*contd.*

This railway is an enterprise by an Indian Company floated for the purpose under a guarantee from the Mysore Darbar of 4 per cent. per annum on the subscribed capital. Its construction was sanctioned by the Secretary of State for India in his Despatch No. 75-Railway, dated the 10th September 1909. As the Company was unable to raise the entire capital, the Darbar undertook to advance the balance of capital as joint owners of the railway and gave the Company the option of paying back the amount later on.

Running power—

Home line over foreign line—

	Miles.
Yesvantpur to Yelahanka, Madras and Southern Mahratta (3′ 3¾″ gauge) railway, with the help of a 3rd rail	6·85

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Bangalore City to Yesvantpur	7-1-18	3·33		
Yesvantpur to Yelahanka	1-2-17	*6·85		*This is on a mixed (3′ 3¾″ and 2′ 6″) gauge.
Yelahanka to Devanhalli	6 4-15	14·70		
Devanhalli to Chik Ballapur	1-8-15	13·75		
TOTAL OPEN MILEAGE	..	..	38·63	

Details of construction—

Permanent-way.—The permanent-way consists of second hand 41½-lb. flat-footed steel rails, purchased from the Madras and Southern Mahratta Railway Company, laid on steel sleepers. Teak sleepers have been used in station yards.

Ballast.—The line is for the present packed upon gravel ballast

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The steepest gradient is 1 in 100.

Agreement—

Dated the 4th August 1919, *between the Government of His Highness the Maharaja of Mysore and the Bangalore-Chik Ballapur Light Railway Company, Limited*, as to the construction, maintenance and working of the Bangalore-Chik Ballapur Light Railway.

Main provisions of agreement—

[NOTE. Under this head, the expression "Government" means, the Government of His Highness the Maharaja of Mysore except where otherwise stated.]

(i) *Land.*—Land provided by Government free of cost.

(ii) *Government aid.*—The Government have supplied the capital, which the Company was unable to raise, and guarantee interest at the rate of 4 per cent. per annum on the capital contributed by the Company The Company have the option of purchasing, within 10 years from the date of opening the line to public traffic, the interest of the Government in the railway until such time as the Company are unable to acquire the interest of the Government in the railway. The Government have entire control over the construction, maintenance and working of the railway.

(iii) *Terms of working.*—The line is worked by the Government on behalf of the Company at actual cost, free of any charge for Government supervision.

(iv) *Distribution of profits.*—After the payment of working expenses and interest at 4 per cent. per annum on the capital contributed by the Company and the Government from the gross earnings of the line the balance, if any is divided as follows:—

10. MYSORE STATE RAILWAYS SYSTEM—*contd.*

(*b*) **Bangalore-Chik Ballapur Light Railway** (2′ 6″ gauge)—*concld.*

Half to the Government as the guarantors of interest on capital, and the remainder charged by the Company and the Government in the ratio of the capital contributed.

(v) *Rates and fares.*—

(vi) *Special obligations as to the conveyance of*—
(*a*) Mails, troops, police, high Government officials and Government stores.
(*b*) Government bullion and coin, and the persons in charge thereof.

} Not specified.

(vii) *Power of the Government to determine agreement.*—The Government have power to purchase the interest of the Company in the railway 30 years after its opening to public traffic, or at subsequent intervals of 10 years, by paying them 25 times the average yearly net earnings (excluding payment on account of guarantee) corresponding to their capital during the last preceding 3 years, subject to a maximum of 120 per cent. and a minimum of 100 per cent. of their share of the capital expenditure.

They also have power to purchase the Company's interest when it is considered desirable that the gauge of the line should be altered, or to convert it into a line of through communication, or to extend it, and the Company is unable to supply necessary capital for such extension. In this case the price payable shall be 25 times the average net earnings referred to above or 115 per cent. of the Company's share of the capital expenditure, whichever may be the greater.

(viii) *Power of the Company to surrender agreement.*—Nil.

(ix) *Term of agreement* [*if not determined under* (vii)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1914-15	14·72	7,80,104	Information not available.				
1915-16	28·47	10,18,730	52,503	18,397	1·81	35	64·96
1916-17	35·18	9,11,740	71,660	16,826	1·79	39	77·21
1917-18	38·63	11,57,634	1,04,642	33,132	2·86	52	68·34
1918-19	38·63	11,53,681	1,40,424	24,193	2·10	70	82·77
1919-20	38·63	11,59,794	1,47,303	36,903	3·18	73	74·05
1920-21	38·63	12,40,938	1,54,314	41,415	3·34	77	73·16
1921-22	38·63	12,80,703	1,78,777	22,828	1·78	89	87·23
1922-23	38·63	14,64,613	1,72,335	15,584	1·06	85	90.95
1923-24	38·63	14,76,115	1,69,049	17,816	1·21	84	89·46
1924-25	38·63	14,83,840	1,89,513	37,906	2·55	94	80·00
1925-26	38·63	14,88,760	1,87,200	22.279	1·50	93	88·10
1926-27	38·63	15,21,051	1,86,921	44,594	2·93	93	76·14
1927-28	38·63	15,12,053	1,96,202	55,671	3·68	98	71·63
1928-29	38·63	15,28,597	1,88,409	41,342	2·70	94	78·06
1929-30	38·63	15,44,770	1,70,015	44,000	2·85	85	74·11
1930-31	38·63	15,59,600	1,17,652	—6,838	—0·44	59	105·81
1931-32	38·63	15,80,000	1,06,000	28,000	1·75	52	73·80
1932-33	38.63	15,78,000	1,16,000	26,000	1·69	58	77·10
1933-34	38·63	16,11,000	1,17,000	28,000	1·68	58	76·73
1934-35	38·63	16,13,000	1,11.000	11,000	0·66	55	90·43
1935-36	38·63	16,14,000	1,27,000	21,000	1·29	63	83·46
1936-37	38·63	16,20,000	1,24,000	21,000	1·32	62	82·89
1937-38	38.63	16,22,000	1,33,000	24,000	1·46	66	82.07
1938-39	38.63	16,63,000	1,34,000	45,000	2·68	67	66.68

(*c*) **Kolar District Railway** (2′ 6″ gauge)—

The first section, from Bowringpet to Kolar, formerly known as the Bowringpet-Kolar railway, was constructed by the Mysore Durbar under sanction conveyed in Government of India, Foreign Department, letter No. 2161-I.-B., dated the 15th October 1912. It was financed entirely by the District Board of Kolar from the proceeds of a debenture loan. Later on as the District Board were unable to raise the entire capital for the whole line, from Bowringpet to Chik Ballapur, the cost was borne in equal proportions both by the Durbar and the District Board.

10. MYSORE STATE RAILWAYS SYSTEM—*contd.*

(c) Kolar District Railway (2′ 6″ gauge)—*contd.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bowringpet to Kolar	15-12-15	10·51	
Kolar to Chintamani	6-3-16	29·79	
Chintamani to Chik Ballapur	8-11-16	23·27	
TOTAL	..	..	63·57

Details of construction—

Permanent-way.—The permanent-way consists of 41½-lb. second-hand rails for 41 miles, and 41½-lb. new rails, from the Tata Iron and Steel Company, for the remainder. The rails are laid on steel sleepers for 37 miles, and on wooden sleepers for 27 miles. The wooden sleepers are mostly teak, a small percentage being jalare and jambe.

Ballast.—The line between Bowringpet and Kolar is ballasted with sand and between Kolar and Chintamani boxed with good gravelly soil. Between Chintamani and Chik Ballapur the ballast consists of moorum, except at bridge approaches where broken stone is used.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 716 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

Dated the 1st December 1920, *between the Government of His Highness the Maharaja of Mysore and the District Board of Kolar,* as to the construction, maintenance and working of the Kolar District railway.

Main provisions of agreement—

NOTE.—Under the head, the expression "Government" means the Government of His Highness the Maharaja of Mysore except where otherwise stated.

(*i*) *Land.*—Land provided by Government free of cost, including land required for quarrying, ballast for brick-fields and similar purposes.

(*ii*) *Government aid.*—The Government have guaranteed the payment of interest at 4 per cent. per annum on the loan raised by the District Board and used for the Capital expenditure on the railway.

The Government have given the District Board the option of purchasing within 25 years from the date of opening of the Kolar-Chik Ballapur section to traffic, the interest of the Government in the railway. So long as the line remains the joint property of the Government and the District Board the entire control over the construction, maintenance and working of it shall be with the former.

(*iii*) *Terms of Working.*—The line is worked by the Government on behalf of the District Board at actual cost, free of any charge for Government supervision. Any loss on working shall be borne by Government.

(*iv*) *Distribution of profit.*—The net earnings of the Railway should be distributed between the partners *viz.*, Government and the District Boards in proportion to the capital contributed by each (whateverbe the source from which such capital has been obtained by either partner).

The District Board is entitled to be reimbursed of the deficit, if any, to make up 4 per cent. in respect of that part of the capital which is contributed by it out of Debenture loan collections.

NOTE.—As per Government Orders Nos. L. 8697-760/L. B. 114-24-59, dated 7th June 1927 and L. 1268-71/L. B. 114-24-61, dated 8/9th August 1928, the gross earnings of the Railway, after payment of Working Expenses, are to be distributed between the Government and the District Board in proportion to the capital contributed by each (whatever be the source from which such capital has been obtained by either partner); and the District Board are to be reimbursed for the deficit, if any, to make up 4 per cent. in respect of that part of the capital contributed by the Board out of Debenture Loan collections.

(*v*) *Rates and fares.*—

(*vi*) *Special obligations as to the conveyance of—*
(*a*) Mails, troops, police, high Government Officials, and Government Stores.
(*b*) Government bullion and coin and the persons in charge thereof.
} Not specified.

(*vii*) *Power of the Government to determine agreement.*—The Government have power to purchase the interest of the District Board in the railway 30 years after its opening to public traffic or at

10. MYSORE STATE RAILWAYS SYSTEM—*contd.*

(c) Kolar District Railway (2′ 6″ gauge)—*concld.*

Main provisions of agreement—*concld.*

subsequent intervals of 10 years by paying them 25 times the average yearly net earnings (excluding payment on account of guarantee) corresponding to their capital during the last preceding three years, subject to a maximum of 120 per cent. and a minimum of 100 per cent. of their share of the capital expenditure.

They also have power to purchase the Board's interest when it is considered desirable that the gauge of the line should be altered or to convert it into a line of through communication or to extend it, and the District Board is unable to supply necessary capital for such extension. In this case the price payable shall be 25 times the average net earnings referred to above or 115 per cent. of the District Board's share of the capital expenditure, whichever may be the greater.

(*viii*) *Power of the District Board to surrender agreement.*—Nil.

(*ix*) *Term of agreement* [*if not determined under* (*vii*)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportions of expense to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	10·92	2,95,577	7,598	—253	..	43	103·33
1914-15	10·92	6,42,569	36,093	4,815	0·75	64	86·66
1915-16	40·43	14,06,864	47,918	12,305	0·87	23	74·32
1916-17	63·57	17,09,216	1,05,093	14,942	0·88	32	85·78
1917-18	63·57	18,74,516	1,56,758	31,722	1·69	47	79·76
1918-19	63·57	19,32,057	1,61,558	—17,597	..	49	110·89
1919-20	63·57	19,56,775	2,00,019	46,644	2·38	61	76·68
1920-21	63·57	20,90,518	2,02,261	55,849	2·67	61	72·39
1921-22	63·57	21,82,928	2,05,773	22,677	1·04	62	88·98
1922-23	63·57	25,24,076	2,33,569	22,746	0·90	70	90·26
1923-24	63·57	25,54,577	2,[illegible]6,465	47,278	1·85	78	81·56
1924-25	63·57	24,84,958	2,48,932	42,853	1·72	75	82·79
1925-26	63·57	24,93,333	2,58,283	35,[illegible]37	1·43	78	86·24
1926-27	63·57	25,51,636	2,63,647	60,682	2·38	79	76·98
1927-28	63·57	25,67,941	3,07,690	90,697	3·53	93	70·52
1928-29	63·57	26,02,693	3,07,363	74,023	2·84	93	75·91
1929-30	63·57	26,23,888	2,75,788	72,000	2·74	83	73·97
1930-31	63·57	26,51,090	2,24,622	—11,969	—0·45	68	105·33
1931-32	63·57	26,87,000	1,76,000	47,000	1·74	53	73·43
1932-33	63·57	26,90,000	1,90,000	45,000	1·66	57	76·39
1933-34	63·57	27,56,000	1,82,000	43,000	1·55	55	76·50
1934-35	63·57	27,57,000	1,83,000	16,000	0·60	55	91·01
1935-36	63·57	27,60,000	1,93,000	33,000	1·20	58	82·90
1936-37	63·57	27,55,000	1,66,000	27,000	0·98	50	83·73
1937-38	63·57	27,59,000	1,73,000	32,000	1.15	52	81.66
1938-39	63·57	28,35 000	1,91,000	66,000	2.33	58	65.56

10. MYSORE STATE RAILWAYS SYSTEM—*contd.*

(*d*) **Tarikere-Narasimharajapura Tramway** (2′ 0″ gauge)—

The construction of this tramway in Mysore by the Darbar, under the provisions of the Mysore Tramways Regulation No. II of 1906, was sanctioned by the Government of India in the Foreign Department letter No. 3225-I.B., dated the 25th September 1913.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tarikere, on the Birur-Shimoga railway, to Lakvalli	22-5-15	11·88	
Lakvalli to Narasimharajapura	15-5-17	14·72	
TOTAL .	..	..	26·60

Details of construction—

Permanent-way.—The permanent-way consists of 24-lb. flat-footed rails laid on wooden sleepers.

Ballast.—The line is packed with gravel ballast.

Fencing.—The line is unfenced throughout.

Curves.—The radius of the sharpest curve is 191 feet.

Gradients.—The ruling gradient is 1 in 50.

Agreement—

Nil.—The line is owned and worked by the Mysore Government.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles	Rs.	Rs.	Rs.		Rs.	
1914-15 .	12·00	2,50,673	Information not available.				
1915-16 .	11·75	2,97,416	7,625	—2,109	..	12	127·66
1916-17 .	11·88	3,47,437	*925	—3,687	..	3	498·59
1917-18 .	26·60	5,03,311	17,798	—9,572	.	14	153·78
1918-19 .	26·60	5,76,600	27,734	—12,445	..	20	144·87
1919-20 .	26·60	6,35,416	27,630	3,890	0·61	20	85·92
1920-21 .	26·60	6,48,880	34,756	8,009	1·23	25	76·96
1921-22 .	26·60	6,76,939	37,634	4,230	0·62	27	88·77
1922-23 .	26·60	7,09,451	45,000	6,532	0·92	32	85·42
1923-24 .	26·60	7,20,870	36,000	5,538	0·77	26	84·62
1924-25 .	26·60	7,90,934	45,928	1,877	0·24	33	95·91
1925-26 .	26·60	8,02,569	62,000	12,400	1·55	45	80·00
1926-27 .	26·60	8,10,154	47,270	—3,705	..	34	107·84
1927-28 .	26·60	8,18,598	53,678	22,359	2·73	39	58·35
1928-29 .	26·60	9,06,848	40,731	18,089	1·99	30	55·59
1929-30 .	26·60	9,12,881	46,943	12,425	1·36	34	52·23
1930-31 .	26·60	9,23,122	42,285	17,457	1·89	30	58·72
1931-32 .	26·60	9,33,604	37,665	12,861	1·38	27	65·85
1932-33	26·60	9,37,263	45,000	13,000	1·39	32	69·98
1933-34 .	26·60	†9,55,406	46,000	16,000	†1·67	33	65·44
1934-35 .	26·60	9,59,000	39,000	8,000	0·83	28	79·49
1935-36 .	26·60	9,81,000	41,000	1,000	0·10	29	95·12
1936-37 .	26·60	9,83,000	38,000	7,000	0·71	27	81·55
1937-38 .	26.60	9,83,000	38,000	7,000	0.77	27	80.18
1938-39 .	26.60	9,83,000	34,000	13,000	1.34	25	61·13

* †The decrease is due to the closing of the line to traffic for a portion of the year. †Revised figures.

10. MYSORE STATE RAILWAYS SYSTEM—*contd.*

(*e*) *Tadasa-Hebbe Tramway—

The construction of this Tramway in Mysore by the Durbar, under the provisions of the Mysore Tramways Regulation No. II of 1906, was sanctioned by the Government of India in the Foreign Department letter No. 1884-I. B. of 27th August 1917.

Progress in opening :—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tadasa Hebbe Tramway	5-2-21	9·60	9·60

Details of construction—

Permanent-way.—The permanent-way consists partly of second hand flat-footed rails of 24 lbs. Section and partly of 30 lbs. Section new rails.

Ballast.—The line is ballasted by gravel and local earth.

Fencing.—The line is unfenced throughout.

Gradients.—The ruling gradient is 1 in 100.

Agreement.—

Nil—The line is owned and worked by the Mysore Government.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1936-37	9·60	3,31,000	8,000	2,000	0·46	16	79·98
1937-38 . ..	9·60	3,31,000	9,000	2,000	0·51	18	80·99
1938-39 . ..	9·60	3,31,000	12,000	5,000	1·47	24	59·06

*This Tramway is not open for passenger or public traffic of any kind, but meant purely for goods (forest) traffic and hence has not been included as an integral part of the Mysore Railway System.

(*f*) Bangalore-Harihar railway (3′ 3⅜″ gauge)—

This line, which was being worked by the Madras and Southern Mahratta Railway Company, was taken over by the Mysore State Railways from 1st January 1938 and is worked as a part of their metre gauge system.

10. MYSORE RALIWAYS SYSTEM—*concld.*

(*f*) Bangalore-Harihar Railway (3′ 3⅜″ gague)—*concld.*

Statistics of working (Those for the periods prior to 1887 will be found in Appendix 38 to the Railway Administration Report for 1907)—Includes the Hindupur (Yesvantpur-Mysore Frontier) railway from 1908; and the Birur-Shimoga, Mysore-Nanjangud and Mysore-Bangalore railways from 1908 to the 30th September 1919

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings	Net earnings. *	Percentage of net earnings on total capital outlay given in column 3.	Interest.	Company's share of surplus profit (based on terms of contract) attributable to each year.	Gain or loss to the State pertaining to each year.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1887 .	139·75	91,36,438	5,13,259	1,40,723	1·54	6,70,864	35,018	—5,65,159	71	72·58
1888 .	139·75	1,25,76,692	5,70,657	1,34,031	1·07	6,94,210	33,607	—5,93,786	79	76·51
1889 .	290·00	1,44,24,093	8,96,273	2,19,813	1·52	7,07,500	54,991	—5,42,678	72	75·47
1890 .	296·00	1,47,11,610	11,86,318	2,59,084	1·76	6,48,733	64,772	—4,54,421	77	78·16
1891 .	296·00	1,50,76,285	13,24,525	4,39,280	2·91	6,54,850	1,09,760	—3,25,330	86	66·83
1892 .	296·00	1,46,36,205	13,99,463	4,43,427	3·03	7,29,624	1,10,863	—3,97,060	91	68·31
1893 .	296·00	1,46,42,217	16,83,202	6,74,562	4·61	7,70,439	1,68,171	—2,64,048	109	59·92
1894 .	296·00	1,47,60,293	14,45,412	4,77,149	3·23	8,38,525	1,19,039	—4,80,415	94	66·99
1895 .	296 00	1,49,22,452	15,78,281	6,29,385	4·22	8,70,947	1,56,931	—3,98,493	103	60·12
1896 .	296·00	1,51,08,257	15,84,981	6,76,976	4·48	8,21,588	1,69,189	—3,13,801	103	57·29
1897 .	296·00	1,51,09,757	18,80,019	7,98,285	5·25	7,75,708	2,00,031	—1,77,454	122	57·54
1898 .	296·00	1,55,07,319	13,92,851	4,13,421	2·67	7,38,461	1,02,680	—4,27,720	90	70·32
1899 .	296·00	1,56,75,416	10,60,469	3,29,033	2·10	7,21,117	82,076	—4,74,160	69	68·97
1900 .	296·00	1,58,70,510	13,76,391	4,71,201	2·97	7,18,200	1,18,888	—3,65,887	89	65·77
1901 .	296·36	1,60,14,879	14,33,240	4,07,791	2·55	7,22,244	1,01,860	—4,16,313	93	71·55
1902 .	296·22	1,60,76,009	15,97,046	5,58,082	3·47	7,21,062	1,39,538	—3,02,518	104	65·06
1903 .	296·22	1,62,34,903	15,35,270	5,82,298	3·59	7,20,000	1,46,012	—2,83,714	100	62·07
1904 .	296·22	1,62,59,794	15,85,324	5,63,607	3·47	7,20,000	1,40,940	—2,97,273	103	64·44
1905 .	296·22	1,64,78,981	17,90,901	6,98,051	4·24	7,20,000	1,73,883	—1,95,832	116.	61·02
1906 .	296·22	1,65,59,502	18,48,348	7,19,072	4·34	7,20,000	1,79,500	—1,80,428	120	61·10
1907 .	296·22	1,70,31,855	21,57,636	8,44,427	4·96	7,20,000	2,11,472	—87,045	140	60·86
1908 .	401·29	2,29,75,788	30,71,949	11,66,353	5·08	8,64,949	1,51,026	+1,50,378	147	62·03
1909 .	401·29	2,32,36,445	26,71,013	10,67,326	4·59	10,43,592	55,389	—31,656	128	60·04
1910 .	401·29	2,35,17,190	28,00,896	11,28,684	4·80	10,48,807	57,763	+22,024	134	59·70
1911 .	401·29	2,36,85,396	28,55,654	12,07,863	5·10	10,60,843	61,457	+85,563	137	57·70
1912 .	401·29	2,37,80,303	33,53,931	14,93,756	6·28	10,63,291	75,262	+3,55,203	161	55·46
1st qr. of 1913.	401·29	2,40,63,067	9,40,540	4,75,274	1·98	2,67,455	24,132	+1,83,687	180	49·47
1913-14	401·35	2,43,70,036	36,51,923	15,89,726	6·52	10,75,557	79,836	+4,34,333	175	56·47
1914-15	401·35	2,42,44,450	34,77,899	14,82,838	6·12	10,83,776	73,981	+3,25,081	167	57·37
1915-16	401·35	2,43,43,685	35,94,259	16,67,478	6·85	10,86,828	83,396	+4,97,254	172	53·61
1916-17	401·35	2,44,88,478	38,16,213	18,27,236	7·46	10,88,546	90,018	+6,48,672	183	52·12
1917-18	401·35	2,47,22,416	39,75,988	20,76,203	8·40	10,97,276	1,04,691	+8,74,236	191	47·78
1918-19	401·35	2,49,48,980	42,84,709	21,75,151	8·72	11,06,632	1,07,960	+9,60,559	205	49·23
1919-20	261·60	1,66,77,646	29,65,763	17,94,122	7·07	8,22,044	88,812	+8,83,266	230	54·76
1920-21	261·60	1,68,74,624	35,33,779	11,71,902	6·94	6,21,415	56,586	+4,93,901	260	66·84
1921-22	261·60	1,73,64,567	36,11,239	10,54,646	6·07	7,87,785	50,723	+2,16,138	265	70·80
1922-23	261·60	1,75,49,460	42,29,219	14,84,752	8·46	8,40,659	71,593	+5,72,500	311	64·89
1923-24	261·60	1,76,99,195	42,58,809	17,81,335	10·06	8,06,965	86,344	+8,88,026	313	58·17
1924-25	261·60	1,78,63,636	44,28,711	19,11,105	10·70	7,68,860	92,196	+10,50,049	325	56·85
1925-26	261·60	1,81,81,324	46,52,033	20,54,899	11·30	7,54,696	98,825	+12,01,378	341	55·80
1926-27	261·60	1,83,32,641	47,75,414	21,11,912	11·50	7,68,885	1,00,646	+12,42,381	350	54·60
1927-28	261·60	1,85,46,178	51,12,986	21,12,350	11·39	7,75,994	99,913	+12,36,443	374	58·69
1928-29	261·60	1,87,01,179	48,68,171	24,38,504	13·04	7,79,279	1,16,323	+15,42,902	357	49·91
1929-30	261·60	1,92,85,627	47,65,094	22,18,753	11,50	7,94,024	1,03,825	+13,20,904	349	53·43
1930-31	261·60	1,95,01,066	41,91,789	17,65,574	9·05	8,17,544	79,470	+8,68,560	308	57·90
1931-32	261·68	2,01,98,761	42,70,133	19,82,378	9·81	8,28,769	89,761	+10,63,848	314	53·58
1932-33	261·68	2,02,16,908	39,96,627	16,42,839	8·13	8,43,077	71,739	+7,28,023	294	58·89
1933-34	261·68	2,04,20,066	36,82,407	16,24,791	7·96	8,47,503	70,323	+7,06,965	271	55·88
1934-35	261·68	2,05,12,284	37,07,109	15,00,814	7·32	8,53,324	62,991	+5,84,499	272	59·52
1935-36	261·68	2,06,39,502	37,46,410	14,36,542	6·96	8,57,622	59,764	+5,19,156	275	61·66
1936-37	261·68	2,09,33,347	37,68,271	14,88,946	7·11	8,66,044	62,286	+5,60,616	277	60·49
1937-38	261·68	2,09,96,941	36,45,134	14,30,739	6·81	8,88,504	†46,006	+4,96,229	268	60.75
		Further information merged in the Mysore State Railways metre gauge system.								

* Payable to Mysore Durbar as surplus profits.

† Includes nine months profit for Bangalore-Harihar and Yeshwantpur-Hindupur Railway and full year profits for Kolar Gold Fields Railway.

(*g*) Hindupur (Yesvantpur-Mysore Frontier) railway (3′ 3⅜″ gauge)—

This line, which was being worked by the Madras and Southern Mahratta Railway Company, was taken over by the Mysore State Railways from 1st January 1938 and is worked as a part of their metre gauge system.

Statistics of working—Included with the Bangalore-Harihar Railway.

LIBRARY
OF THE

NIZAM'S RAILWAY SYSTEM.

REFERENCES.

Nizam's State Railway ---------- 5'-6" 3'-3 3/8"

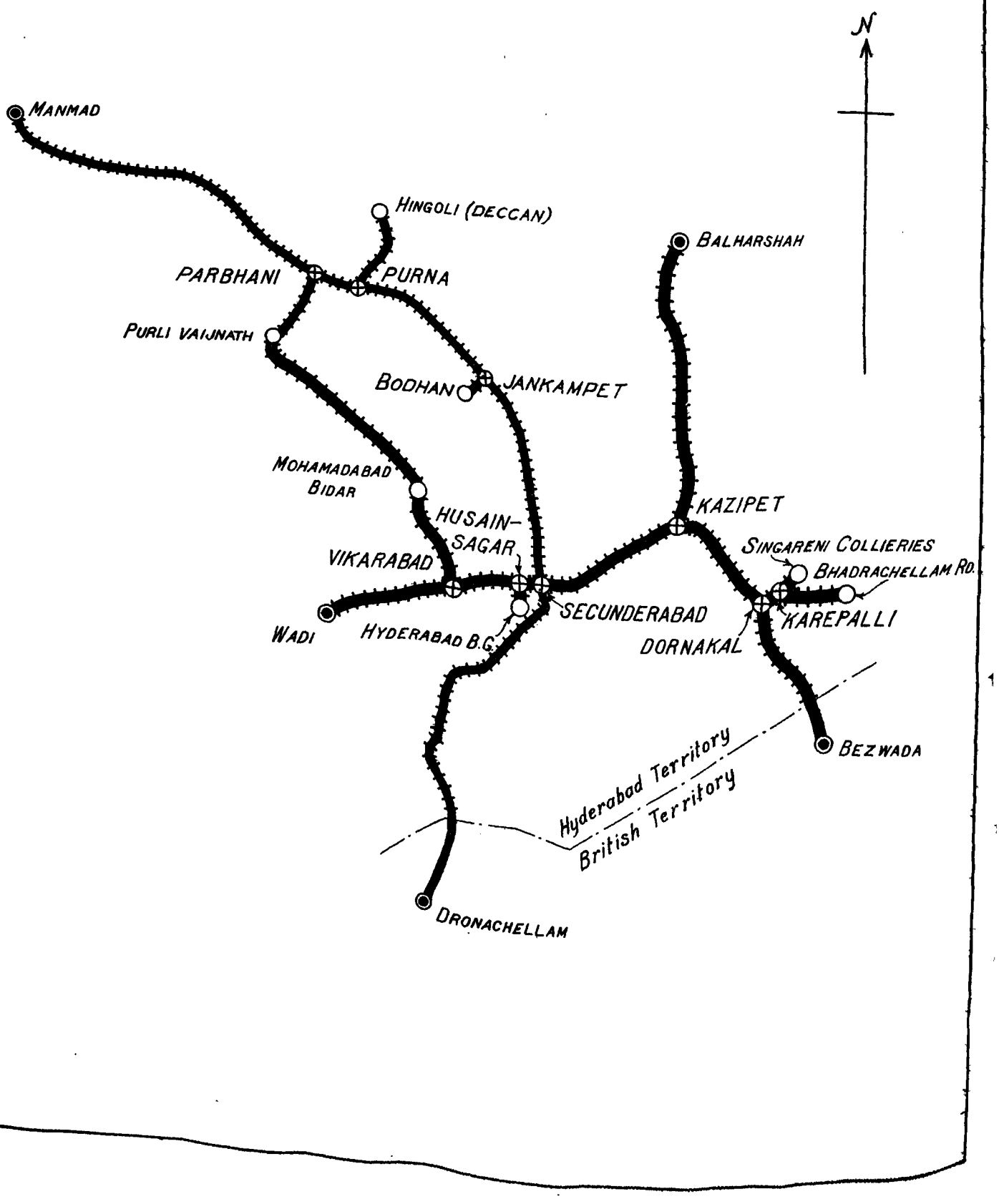
State lines ----------

Home, Branch and Local line Junctions ---------- ⊕ ⊕

Junctions connecting Foreign lines ---------- ◉ ◉

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.



11. HIS EXALTED HIGHNESS THE NIZAM'S STATE RAILWAY SYSTEM.

President.—The Right Hon'ble Sir Akbar Hydari (Nawab Hyder Nawaz Jung Bahadur), Kt., P.C., LL.D., D.C.L.

Chairman.—Sir James Brunyate, K.C.S.I., C.I.E.

Managing Director.—C. W. Lloyd Jones, Esq., C.I.E.

Secretary.—F. Adams, Esq.

Office.—274, Gresham House, Old Broad Street, London, E. C. 2.

Lines comprised in the system.

The Nizam's State Railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) H. E. H. the Nizam's State Railway (5′ 6″ gauge)	666·64	..	666·64
(*b*) Bezwada Extension Railway (5′ 6″ gauge)	21·47		21·47
(*c*) H. E. H. the Nizam's State Railway (3′ 3⅜″ gauge)	635·52	100·69	736·21
(*d*) Dronachellam (Dhone-Kurnool) Railway (3′ 3⅜″ gauge)	36·28	..	36·28
Total	1,359·91	100·69	1,460·60

The broad gauge system of this Railway includes the section Wadi to the frontier of H. E. H. the Nizam's dominions, north-west of Bezwada, Dornakal to the Singareni Collieries, Karepalli to Bhadrachellam Road, Kazipet to Balharshah and Vikarabad to Purli Vaijnath. Up to the end of 1878 the section from Wadi to Secunderabad was worked by the Great Indian Peninsula Railway and from January 1879 to 31st December 1884 by the State Railway Agency. H. E. H. the Nizam's Guaranteed State Railways Company worked this section, together with its extension to the Frontier, from January 1885 to March 1930. The remaining sections were constructed from funds provided by H. E. H. the Nizam's Government and were also worked by H. E. H. the Nizam's Guaranteed State Railways Company.

The metre gauge system comprises the section from Secunderabad to Manmad, Purna to Hingoli, Secunderabad to the frontier of H. E. H. the Nizam's dominions and Parbhani to Purli Vaijnath all of which were worked by H. E. H. the Nizam's Guaranteed State Railways Company up to 31st March 1930.

The agreements between H. E. H. the Nizám's Government and the Company for working for all the sections referred to above both broad and metre gauge were determined on 1st April 1930, from which date the railways were brought under the management of the Hyderabad State.

During the year in question the section from Jankampet to Bodhan was opened for traffic from 1st November 1938 and now forms part of the metre gauge system. This section was constructed from funds provided by H. E. H. the Nizam's Government.

(a) His Exalted Highness the Nizam's State Railway (5′ 6″ gauge).

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Broad gauge—				
Main Line.				
Wadi Junction to Secunderabad	9-10-74	115·45		
Secunderabad to Warangal	8-4-86	86·71		
Warangal to Dornakal	1-1-88	52·66		
Dornakal to Bonakalu	5-8-88	31·99		
Bonakalu to the British frontier	10-2-89	23·54		
Branches.				
Kazipet to Pedapalli	1-2-24	46·94		
Pedapalli to Ramgundam	1-7-24	10·84		
Ramgundam to Asifabad Road	15-10-27	35·47		
Asifabad Road to Balharshah	15-11-28	52·44		
Vikarabad to Mohamadabad Bidar	14-1-30	56·57		
Hussain Sagar to Hyderabad	9-10-74	3·57		
Dornakal to Singareni collieries	1-1-88	16·26		
Karepalli to Bhadrachellam Road	21-3-27	24·52		
Mohamadabad Bidar to Udgir (Nizam)	1-7-32	50·68		
Udgir (Nizam) to Purli Vaijnath	1-3-33	59·00		
Total open mileage	..	..	666·64	

11. HIS EXALTED HIGHNESS THE NIZAM'S STATE RAILWAY SYSTEM—*contd.*

(a) His Exalted Highness the Nizam's State Railway (5′ 6″ gauge)—*contd.*

Details of construction—

1. Wadi to British Frontier (5′ 6″ gauge)—

Permanent way.—The permanent way from Wadi to British Frontier consists of 85 lbs. flat-footed steel rails on steel, Douglas Fir and other wooden sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is fenced from Wadi to Secunderabad but from Secunderabad to British Frontier only the station yards are fenced.

Curves.—The sharpest curve is of 1,300 feet radius.

Gradients.—The ruling gradient is 1 in 100 on the Secunderabad-British Frontier section and 1 in 150 on the Wadi-Secunderabad Section.

2. Dornakal to Singareni Collieries (Mineral Branch) (5′ 6″ gauge)—

Permanent way.—The permanent way consists of 75 lbs. B. H. rails laid on cast iron pot sleepers and on wooden sleepers with C. I. Chairs.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is not fenced but only the station yards are fenced.

Curves.—The sharpest curve is of 2,000 feet radius.

Gradients.—The ruling gradient is 1 in 100.

3. Karepalli-Kothagudium Railway (5′ 6″ gauge)—

Permanent way.—The permanent way consists of 75 lbs. B. H. rails laid on cast iron pot sleepers.

Ballast.—The line is ballasted throughout with moorum.

Fencing.—The line is not fenced but only the station yards have been fenced.

Curves.—The sharpest curve is of 2,292 feet radius.

Gradients.—The ruling gradient is 1 in 100.

4. Kazipet-Balharshah Railway (5′ 6″ gauge)—

Permanent way.—The permanent way consists of 85 lbs. flat-footed rails laid on steel sleepers.

Ballast.—The line is fully ballasted throughout with stone.

Fencing.—No fencing is provided.

Curves.—There are no curves with a radius of less than 1,910 feet.

Gradients.—The ruling gradient is 1 in 100.

5. Vikarabad-Bidar Railway (5′ 6″ gauge)—

Permanent way.—The permanent way consists of 60 lbs. steel flat-footed rails, British standard section, and Second-hand 75 lbs. F. F. Rails on steel sleepers.

Ballast.—The ballast consists of earth and moorum. Cuttings are ballasted with stone.

Fencing.—No fencing is provided.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 100.

6. Vikarabad-Bidar Extension Railway (5′ 6″ gauge)—

Permanent way.—The permanent way consists of second-hand 75 lbs. F. F. rails laid on steel sleepers.

Ballast.—The ballast consists of earth and moorum.

Fencing.—No fencing is provided.

Curves.—The sharpest curve is of 1,109 feet radius.

Gradients.—The ruling gradient is 1 in 100.

11. HIS EXALTED HIGHNESS THE NIZAM'S STATE RAILWAY SYSTEM—*contd.*

(*b*) **His Exalted Highness the Nizam's State Railway** (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
METRE GAUGE—				
Main Line.				
Manmad to Jalna	21-10-99	109·28		
Jalna to Sailu	7-12-99	44·79		
Sailu to Parbhani	25-4-00	26·40		
Parbhani to Nander	9-10-00	36·98		
Nander to Sivangaon	23-8-00	17·61		
Sivangaon to Secunderabad	25-4-00	150·59		
Secunderabad to Timmapur	1-2-16	27·00		
Timmapur to Shadnagar	20-2-16	9·25		
Shadnagar to Balanagar	6-3-16	8·25		
Balanagar to Gullapalli	1-4-16	9·00		
Gullapalli to Jadeherla	20-4-16	4·75		
Jadeherla to Mahbubnagar	15-5-16	11·00		
Mahbubnagar to Deverkudra	15-11-16	15·25		
Deverkudra to Kurumurti	1-1-17	9·50		
Kurumurti to Wanaparti Road	15-2-17	8·25		
Wanaparti Road to Shriramnagar	1-2-22	6·83		
Shriramnagar to Gadwal	1-7-22	7·84		
Gadwal to Allumpur Road	20-7-25	28·12		
Allumpur Road to British frontier	1-9-28	3·04		
Jankampet to Bodhan	1-11-38	12·04		
Branches.				
Purna to Hingoli	15-5-12	50·31		
Parbhani to Gangakher	16-10-29	21·14		
Gangakher to Purli Vaijnath	15-12-29	18·30		
			635·52	
UNDER CONSTRUCTION OR SANCTIONED FOR CONSTRUCTION—				
Mudkhed to Adilabad	..	100·69	100·69	
DOUBLE LINE—				
Purna junction station yard	15-5-12	0·38		
Secunderabad to Bolarum	1-4-24	8·16		
Secunderabad to Falaknuma	1-4-24	9·28		
			17·82	

METRE GAUGE.

Details of construction—

1. Hyderabad Godavery Valley Railway (3′ 3⅜″ gauge)—

Permanent way.—The permanent way from Manmad to mile 382 consists of 50 lbs. flat-footed steel rails laid on steel sleepers except within some station limits where wooden sleepers are used. The track from mile 382 to Secunderabad is laid with 66¼ lbs. F. F. rails on steel sleepers. The up road of the Secunderabad-Bolarum doubling consists of 66¼ lbs. F. F. rails on steel sleepers.

Ballast.—The line is ballasted throughout with stone, sand and moorum.

Fencing.—The line is fenced from mile 377¼ to 381 and between mile 249 and 250 and at all stations.

Curves.—The sharpest curve is of 1,433 feet radius.

Gradients.—The ruling gradient is 1 in 133.

2. Hingoli Branch Railway (3′ 3⅜″ gauge)—

Permanent way.—The permanent way consists of second-hand 66¼ lbs. flat-footed steel rails laid on steel sleepers

Ballast.—The ballast used is moorum, except in some cuttings where stone ballast has been laid.

Fencing.—The line is not fenced except in Station yards.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 133.

3. Parbhani-Purli Railway (3′ 3⅜″ gauge)—

Permanent way.—The permanent way consists of 41¼ lbs. second-hand steel flat-footed rails laid on steel, sal and half round wooden sleepers.

Ballast.—The ballast used is moorum except in cuttings where stone ballast has been laid.

Fencing.—No fencing is provided.

Curves.—The sharpest curve is of 1,637 feet radius.

Gradients.—The ruling gradient is 1 in 108.

11. HIS EXALTED HIGHNESS THE NIZAM'S STATE RAILWAY SYSTEM—*contd.*

(b) His Exalted Highness the Nizam's State Railway (3′ 3⅜″ gauge)—*contd.*

Details of construction—*concld.*

4. Secunderabad-British Frontier Section of Secunderabad-Dronachellam Railway (3′ 3⅜″ gauge)—

Permanent-way.—The Up and Down roads between Secunderabad and Faluknuma and the Single track from Faluknuma to British Frontier consists of 66¼-lbs. flat footed rails laid on steel sleepers.

Ballast.—The line is ballasted fully throughout with stone.

Fencing.—The line is fenced in the vicinity of the principal towns and most important stations.

Curves.—The sharpest curve is of 1,432·5 feet radius.

Gradients.—The ruling gradient is 1 in 133·3.

5. Jankampet-Bodhan Railway (3′-3 3/8″ gauge),

Permanent-way.—The permanent way consists of 60 lbs. F. F. second hand rails laid on steel and wooden sleepers.

Ballast.—Moorum has been used except on cuttings where stone ballast has been put in.

Fencing.—The line is fenced in the vicinity of the P. W. D. road running very near to the railway line and also the Mahbubia Sugar Farm.

Curves.—The sharpest curve is of 1,910 ft. radius.

Gradients.—The ruling gradient is 1 in 100.

(c) His Exalted Highness the Nizam's State Railway (5′ 6″ and 3′ 3⅜″ gauges)—

Statistics of Working [excluding Bezwada Extension Railway and Dronachellam (Dhone Kurnool) Railway].

(The figures for the period prior to 1885 will be found in appendix 38 to the Railway Administration report for 1907.)

Year.	Mileage open at end of each year.	Total capital outlay including suspense to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1885 . . .	117·10	2,47,70,823	11,13,950	4,87,024	1·97	178	56·27
1886 . . .	205·37	2,89,19,499	13,81,077	6,94,524	2·40	143	49·71
1887 . . .	205·37	3,27,45,397	15,48,891	5,52,905	1·69	143	64·30
1888 . . .	305·71	3,54,89,073	17,76,075	7,57,467	2·13	118	57·35
1889 . . .	329·20	3,59,09,620	22,57,462	7,69,208	2·14	129	65·93
1890 . . .	329·20	3,76,96,721	25,07,268	10,39,590	2·76	145	58·54
1891 . . .	329·20	3,94,81,752	27,76,437	12,57,860	3·19	151	54·70
1892 . . .	329·20	3,95,48,395	27,80,642	13,24,959	3·35	161	52·35
1893 . . .	330·13	4,01,96,909	30,61,605	14,36,451	3·57	177	53·08
1894 . . .	330·13	4,02,33,826	32,56,885	16,22,028	4·03	188	50·20
1895 . . .	330·13	4,06,43,818	32,15,541	15,77,149	3·88	185	50·95
1896 . . .	330·13	4,08,24,737	33,03,522	17,28,196	4·23	191	47·69
1897 . . .	330·13	4,09,60,944	36,10,354	19,38,769	4·73	208	46·30
1898 . . .	330·13	4,10,54,449	39,07,612	22,74,580	5·54	225	41·79
1899 . . .	484·36	6,15,90,702	41,73,582	25,37,923	4·12	164	39·19
1900 . . .	715·36	6,49,43,941	59,75,079	32,62,811	5·02	165	45·39
1901 . . .	721·55	6,70,89,494	60,87,960	35,71,420	5·32	161	41·34
1902 . . .	721·55	6,86,64,747	66,94,537	36,50,425	5·32	177	54·53
1903 . . .	721·55	6,92,20,904	65,33,382	34,24,677	4·95	173	47·58
1904 . . .	721·26	6,97,51,508	65,44,221	35,65,494	5·11	173	45·52
1905 . . .	721·26	7,04,01,392	72,42,283	41,78,712	5·93	192	42·30
1906 . . .	721·26	7,05,81,843	75,16,608	42,20,644	5·98	199	43·85
1907 . . .	721·26	7,21,20,133	82,40,148	50,77,031	7·04	218	38·39
1908 . . .	721·26	7,30,05,055	79,41,124	45,76,769	6·27	210	42·37
1909 . . .	721·26	7,42,12,130	79,46,791	40,45,546	5·45	210	49·09
1910 . . .	721·26	7,51,49,512	89,70,738	46,51,911	6·19	238	48·14
1911 . . .	721·26	7,55,25,571	92,05,167	40,25,795	5·33	244	56·27
1912 . . .	721·26	7,81,09,468	1,01,37,173	52,23,183	6·69	268	48·47
1st quarter 1913 .	721·26	7,86,10,969	29,37,746	12,30,131	1·56	315	58·13
1913-14 . . .	771·57	8,45,73,924	1,11,29,609	54,56,815	6·45	276	50·97
1914-15 . . .	771·57	8,68,31,208	1,01,02,710	48,03,802	5·53	260	52·45
1915-16 . . .	771·57	8,82,51,435	1,10,85,946	51,55,133	5·84	274	53·49
1916-17 . . .	874·87	9,69,50,912	1,07,56,953	57,42,483	5·92	255	46·62
1917-18 . . .	874·87	9,81,45,115	1,17,14,200	49,91,303	5·09	256	57·39
1918-19 . . .	874·87	9,93,94,551	1,35,52,000	56,95,044	5·73	296	57·98
1919-20 . . .	875·32	10,11,71,503	1,56,35,628	68,34,673	6·76	340	56·29
1920-21 . . .	875·59	10,39,95,483	1,60,81,792	85,48,765	8·22	351	46·84
1921-22 . . .	880·92	10,64,40,912	1,67,14,500	86,99,278	8·17	365	47·95
1922-23 . . .	888·76	10,79,83,106	1,89,97,276	1,13,68,714	10·53	409	40·16
1923-24 . . .	929·95	11,58,16,427	1,79,20,128	89,59,954	7·74	383	50·00
1924-25 . . .	940·79	12,12,61,696	1,85,64,869	1,10,51,398	9·11	378	40·47
1925-26 . . .	968·91	12,36,30,138	1,92,33,983	1,01,70,036	8·23	383	47·12
1926-27 . . .	993·43	13,08,13,226	1,93,74,331	1,15,28,752	8·81	382	40·49
1927-28 . . .	1028·90	13,41,22,345	1,94,16,312	1,15,32,206	8·60	367	40·61
1928-29 . . .	1084·43	13,53,03,019	2,11,13,170	1,27,59,279	9·43	374	39·57
1929-30 . . .	1180·49	14,54,43,834	2,23,67,271	1,32,85,018	9·13	385	40·61
1930-31 . . .	1180·49	13,09,97,336	2,20,84,459	1,08,75,832	8·30	358	50·75
1931-32 . . .	1180·49	13,66,04,145	2,03,52,823	90,76,009	6·64	329	55·41
1932-33 . . .	1290·17	14,21,12,251	1,92,30,099	83,15,708	5·85	301	56·76
1933-34 . . .	1290·12	14,32,40,690	1,96,84,170	83,56,171	5·83	292	57·49
1934-35 . . .	1290·12	14,33,18,546	2,01,80,101	89,53,038	6·25	299	55·63
1935-36 . . .	1290·12	14,37,07,640	2,00,54,762	85,69,635	5·96	297	57·27
1936-37 . . .	1290·12	14,40,43,859	2,15,84,183	1,08,42,053	7·53	320	49·77
1937-38 . . .	1290·12	14,46,38,159	2,31,23,803	1,21,96,964	8·43	343	47·25
1938-39 . . .	1302·16	14,52,06,087	2,28,01,803	1,16,07,325	7·99	335	49·09

11. HIS EXALTED HIGHNESS THE NIZAM'S STATE RAILWAY SYSTEM—*contd.*

(d) Bezwada Extension Railway (5′ 6″ gauge).—

This line, which extends from the frontier of H. E. H. the Nizam's Dominions to Bezwada, was constructed for the Government of India by H. E. H. the Nizam's Guaranteed State Railways Company and was being worked as part of its own system up to 31st March 1930. Consequent on the acquisition of the Company's lines by H. E. H. the Nizam's Government on 1st April 1930, this railway is now being worked by the Hyderabad State as part of the Nizam's State Railway broad gauge system.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Hyderabad frontier to Bezwada	10-2-1889	21·47	*21·47	* Of this 1·22 miles Bezwada Joint Station to the outer signal, are maintained by the Madras and Southern Mahratta Railway.

Details of construction—

Permanent way.—The line is laid with 85 lbs. flat-footed steel rails on steel sleepers.

Ballast.—The line is ballasted throughout with stone and sand.

Fencing.—The line is fenced at stations only.

Curves.—There are no curves with a radius of less than 1,900 feet.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

Dated the 22nd May 1933 between the Railway Board acting on behalf of the Secretary of State and H. E. H. the Nizam's Government.

Main provisions of agreement :—

i. Land.—Provided by the Secretary of State at the cost of Capital.

ii. Government Aid.—The line is the property of the Government of India who provide all funds chargeable to the Capital account, and is managed, maintained, stocked and worked by H. E. H. the Nizam's State Railway.

iii. Terms of working.
iv. Distribution of Profits.} The line is worked by H. E. H. the Nizam's State Railway for the same percentage of its gross earnings as that of the working expenses of the amalgamated undertaking, *i.e.*, the N. S. Railway broad gauge system and the Bezwada Extension Railway to its gross earnings as published in the N. S. Railway Revenue Accounts for the same half year, *plus* 5 per cent. of the gross earnings of the B. E. Railway for the use of rolling stock, together with the share of interest on joint works at Bezwada Junction. But in addition thereto, any extraordinary maintenance charges due to flood and any cause other than ordinary wear and tear shall be charged, with the approval of the Railway Board, to the B. E. Railway. Such extraordinary charges shall be excluded in working out the percentage of ordinary maintenance charges payable by the B. E. Railway. The balance is paid over to the Government of India as the net earnings of the B. E. Railway.

v. Rates and fares.—To be the same as are from time to time obtaining on the N. S. Railway broad gauge system.

vi. Special obligations as to the conveyance of mails, troops, police department and any other department of the Government of India or H. E. H. the Nizam's Government and High officials of such governments.—On same conditions and at the same rates as may be from time to time in force on N. S. Railway broad gauge system or the State Railways of British India whichever may be the less.

vii. Power of the Government to determine agreement
viii. Power of the Nizam's Government to surrender agreement} Terminable on the 31st March in any year, on six months' notice by either party to the other. Any breach of the terms of the contract may lead, *ipso facto*, to its determination.

ix. Term of agreement.—Until terminated under *vii* and *viii*.

11. HIS EXALTED HIGHNESS THE NIZAM'S STATE RAILWAY SYSTEM—*contd.*

(d) Bezwada Extension Railway (5′ 6″ gauge)—*concld.*

Statistics of working—

Those for the period prior to 1930-31 will be found on page 131 of the History of Indian Railways for the year ended 31st March 1930.

NOTE.—From the year 1936-37 the working expenses/net earnings have been arrived at after taking into account the Appropriation to Depreciation Reserve Fund instead of actual expenditure on 'Replacements and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay including suspense to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on capital outlay given in column 3.	Interest.	Gain or loss to the State pertaining to *each year*.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1930-31 . .	21·47	17,66,549	8,87,177	4,55,998	25·81	70,945	+3,85,053	792	48·60
1931-32 . .	21·47	17,70,303	8,33,983	4,00,089	22·60	70,878	+3,29,211	743	52·03
1932-33 . .	21·47	17,94,696	7,18,625	2,98,353	16·62	71,086	+2,27,267	642	58·48
1933-34 . .	21·47	17,96,572	7,74,513	2,67,925	14·91	71,212	+1,96,713	692	65·41
1934-35 . .	21·47	17,97,747	7,88,352	2,85,310	15·87	70,035	+2,15,275	704	63·81
1935-36 . .	21·47	18,03,818	7,85,299	3,31,174	18·36	69,396	+2,61,778	700	57·83
1936-37 . .	21·47	18,05,820	9,35,651	4,34,542	24·06	68,377	+3,66,165	836	53·55
1937-38 . .	21·47	18,06,202	10,38,376	5,38,108	29·79	68,044	+4,70,064	928	48·18
1938-39 . .	21·47	18,06,310	10,87,942	5,92,450	32·80	67,722	+5,24,728	972	45·54

(e) Dronachellam (Dhone Kurnool) Railway (3′ 3⅜″ gauge).

This line extends from the frontier of H. E. H. the Nizam's Dominions up to Dronachellam and is owned by the Government of India. The working of the section from Kurnool to Dronachellam was transferred on 1st October 1928 from the Madras and Southern Mahratta Railway to H. E. H. the Nizam's Guaranteed State Railways Company who constructed the section from the frontier to Kurnool and continued to work the entire section up to 31st March 1930. Consequent on the acquisition of the Company's lines by H. E. H. the Nizam's Government on 1st April 1930, this railway is now being worked by the Hyderabad State as part of the Nizam's State Railway metre gauge system.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
Dronachellam to Kurnool Town	1-1-09	31·91	
Kurnool to British frontier	1-9-28	4·37	36·28

Details of construction—

Permanent way.—The permanent way on the British Frontier Kurnool Town Section mile 151 consists of 66½ lbs. F. F. Steel rails laid on steel sleeper and that of the Kurnool Town, Dronachellam Section is laid with 60 lbs. Steel F. F. rails on Steel sleepers.

Ballast.—The line is fully ballasted throughout with stone.

Fencing.—The line is not fenced except at station yards on the Dronachellam-Kurnool Town section.

Curves.—The sharpest curve is of 1,146 feet radius.

Gradients.—The ruling gradient on the Dronachellam-Kurnool Town section is 1 in 100 and on the Kurnool Town-British Frontier section is 1 in 133·3.

Agreement—

Dated the 22nd May 1933 between the Railway Board acting on behalf of the Secretary of State and H. E. H. the Nizam's Government.

Main provisions of agreement:—

i. Land.—Provided by the Secretary of State at the cost of capital.

ii. Government Aid.—The line is the property of the Government of India who provide all funds chargeable to the capital account and is managed, maintained, stocked and worked by H. E. H. the Nizam's Government.

iii Terms of working.
iv. Distribution of profits. (*a*) H. E. H. the Nizam's Government shall maintain a separate account of the gross earnings of the British Section and at the end of each half year 50 per cent. of the gross earnings should be deducted towards the working expenses of the British Section which shall include the maintenance of the permanent way, the use of rolling stock and all other expenses and charges in connection with working and maintaining the British Section and the balance after making the said deduction

11. HIS EXALTED HIGHNESS THE NIZAM'S STATE RAILWAY SYSTEM—*concld.*

(e) Dronachellam (Dhone Kurnool) Railway (3′ 3⅜″ gauge)—*concld.*

shall be paid over to the Secretary of State as the net earnings of the British Section provided that the charge for working expenses shall be increased from 50 to 55 per cent. in any year in which the gross earnings of the British Section exceed three lakhs and nineteen thousand rupees.

(*b*) The cost of renewal of permanent way and bridges and also the cost of any extraordinary maintenance charges which may be caused by floods or any cause other than ordinary wear and tear shall be charged specially to the British Section in addition to and apart from the percentage charge referred to in clause (*a*) provided that no charge shall be made under this clause without the prior sanction of the Railway Board.

v. Rates and fares.—To be the same as from time to time obtaining on the N .S. Railway, Hyderabad Section provided always that when the rates or routing over the British Section are governed by an agreement with the M. and S. M. Railway approved by the Railway Board the rates charged and the routing shall be in accordance with that agreement.

vi. Special obligations as to the conveyance of mails, troops, police department or any other department of the Government of India or H. E. H. the Nizam's Government and High Officials of such Governments.—On the same conditions and at the same rates, as may be from time to time in force on the Hyderabad section or the metre gauge State Railways of British India whichever may be the less.

vii. Power of the Government to determine Agreement.
viii. Power of the Nizam's Government to surrender Agreement } Terminable on the 31st March in any year by 12 months' previous notice in writing by either party to the other. Any breach of the terms of the contract may lead, *ipso facto*, to its determination.

ix. Term of Agreement.—To remain in force for a period of 5 years from 1st April 1930 provided that if neither the Railway Board nor H. E. H. the Nizam's Government give notice to the other that it is desired that the agreement should terminate at the end of the said 5 years it shall continue in force until either party terminates it under *vii* and *viii*.

Statistics of working—

Those for the period prior to 1930-31 will be found on page 138 of the History of Indian Railways for year ending 31st March 1930.

NOTE.—From the year 1936-37 the net earnings/working expenses have been arrived at after taking into account the Appropriation to Depreciation Reserve Fund instead of actual expenditure on 'Replacements and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay including suspense to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column 3.	Interest.	Gain or loss to the State pertaining to each *year*.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.			Rs.	Rs.	
1930-31 . .	36·37	31,65,313	4,01,981	—4,55,495	..	1,39,819	—5,95,314	212	213·31
1931-32 . .	36·28	26,69,861	4,71,915	—3,613	..	1,41,210	—1,44,823	249	100·77
1932-33 . .	36·28	26,86,657	3,76,294	2,34,739	8·74	1,25,860	+1,08,879	199	37·62
1933-34 .	36·28	27,18,389	4,14,979	2,37,180	8·73	1,25,350	+1,11,830	219	42·85
1934-35 . .	36·28	27,46,143	4,30,485	2,13,752	7·78	1,23,019	+90,733	228	50·35
1935-36 . .	36·28	27,50,446	3,51,636	1,82,694	6·64	1,21,255	+61,439	185	48·04
1936-37 . .	36·28	27,50,910	3,60,543	1,16,403	4·23	1,17,560	—1,157	191	67·71
1937-38 . .	36·28	27,54,869	3,52,959	1,12,983	4·10	1,16,451	—3,468	187	67·99
1938-39 . .	36·28	27,57,610	3,71,997	1,21,484	4·41	1,15,567	+5,917	197	67·34

12. NORTH WESTERN RAILWAY SYSTEM.

Lines comprised in the system.—The North Western railway system is made up of—

	Miles.	
(*a*) North Western Railway (5′—6″ gauge)	*5,738·54	
(*b*) Amritsar Patti Railway (5′—6″ Gauge)	54·81	
(*c*) Hoshiarpur Doab Branch Railway (5′—6″ gauge)—		
Jullundur-Mukerian Section	45·08	
Phagwara-Rahon Section	46·03	
(*d*) Jammu Kashmir Railway (Indian State Section) (5′—6″ gauge)	15·86	
(*e*) Jind-Panipat Railway (Indian State Section) (5′—6″ gauge)	25·94	
(*f*) Khanpur-Chachran Railway (5′—6″ gauge)	21·98	
(*g*) Ludhiana-Dhuri-Jakhal Railway (5′—6″ gauge)	78·58	
(*h*) Mandra-Bhaun Railway (5′—6″ gauge)	46·68	
(*i*) Rajpura Bhatinda Railway (5—6″ gauge)	107·78	
(*j*) Sialkot-Narowal Railway (5′—6″ gauge)	38·70	
(*k*) Sirhind Rupar Railway (5′—6″ gauge)	30·96	
(*l*) Bahawal Nagar Fort Abas Kut-Al-Imara Railway (5′—6″ gauge)	151·51	
(*m*) Kalka Simla Railway (2′—6″ gauge)	59·93	Commercial.
(*n*) Kangra Valley Railway (2′—6″ gauge)	†102·99	Commercial.
(*o*) Trans-Indus Kalabagh Bannu Railway (2′—6″ gauge)	88·33	Commercial.
(*p*) N. W. Railway Zhob Valley Railway (Fortsandeman to Khanai) (2′—6″ gauge)	173·84	
(*q*) Kohat Thal Railway (2′—6″ gauge)	61·86	Strategic.
(*r*) Laki-Pezu-Tank Manzai Railway (2′—6″ gauge)	69·15	Strategic.
(*s*) Jacobabad-Kashmore Railway (2′—6″ gauge)	76·46	Worked.
(*t*) Larkana Dodapur (Sind) Light Railway (2′—6″ gauge)	53·22	Worked.
Total	7,088·23	

*Includes 137·28 miles from Nok Kundi to Zahidan and 5·00 miles from Landi Kotal to Landi Khana closed to public traffic.

†Includes 14.53 miles from Baijnath Paprola to Jogindernagar closed to Public traffic.

Running powers—

Foreign lines over home line :—

E. I. Railway—

(*i*) Meerut City to Meerut Cantonment for passenger trains only . . . . . 1·51

(*ii*) Hynden Cabin to Saharanpur *via* Khanalampura for goods trains only . . . . . 1·45

(*iii*) Hynden Cabin to Saharanpur for Coaching . . . . . 2·66

G. I. P. Railway—

(*i*) Kilokri to New Delhi fro passenger and goods trains . . . . . 5·17

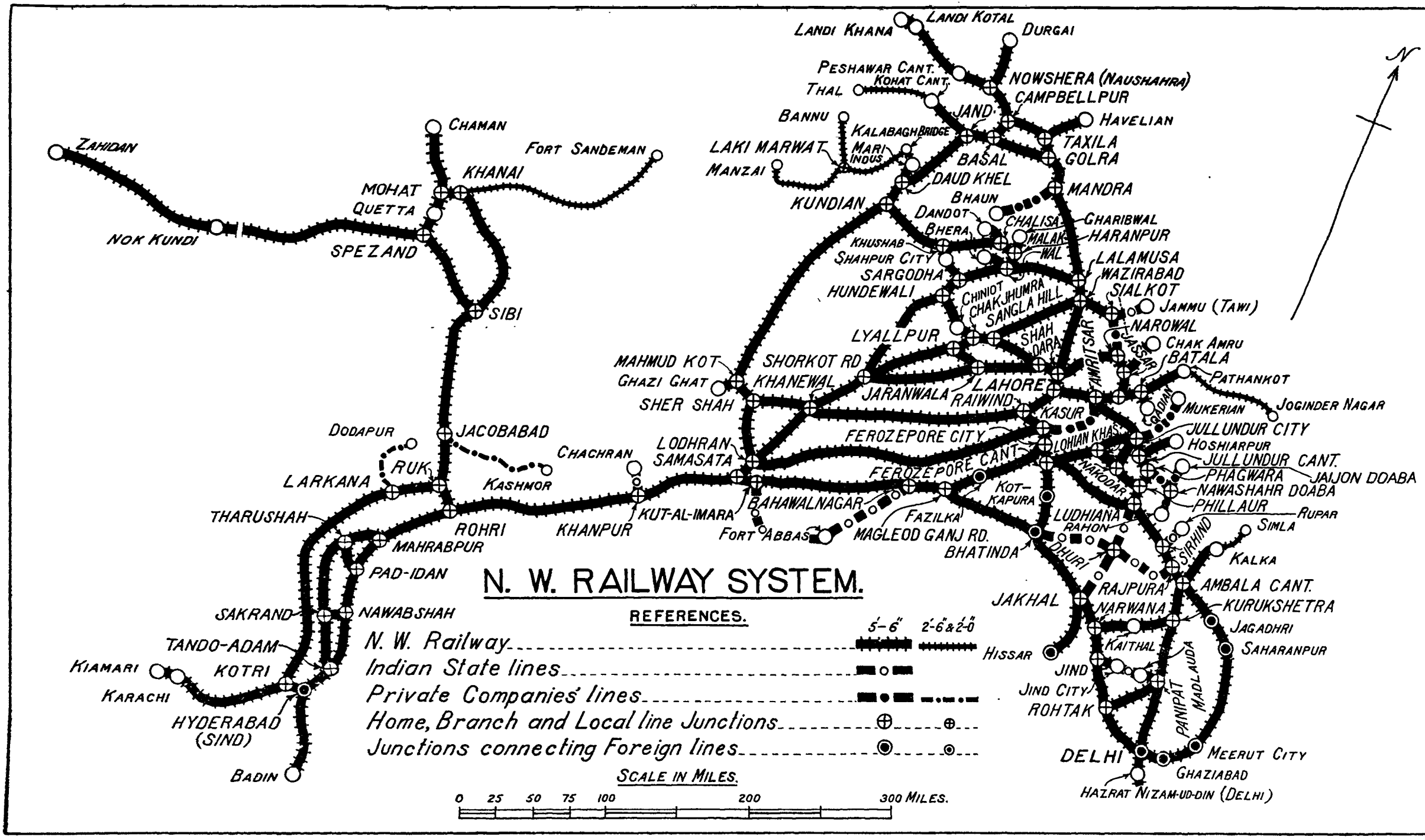
(*a*) North Western railway (5′ 6″ gauge)—

The old Sind, Punjab and Delhi Guaranteed Railway Company was taken over by the State from the 1st January 1886, and amalgamated with the Punjab Northern, the Indus Valley, the Eastern section Sind-Sagar, and the Southern section Sind-Pishin State railways, and worked as one undertaking under the name of the North Western railway.

Date of registration of the old Guaranteed Company—1855.

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5	Remarks. 6
COMMERCIAL SECTION (MAIN LINES)—					
KIAMARI—LAHORE—					
Kiamari-Karachi City	16-6-89	3·07			
Karachi City-Kotri	13-5-61	105·03			
Kotri-Hyderabad	25-5-00	5·29			
Hyderabad-Detha	28-3-10	6·25			
Detha-Rohri	15-11-96	178·81			
Rohri-Nara Canal Bridge	0-0-89	1·00			
Nara Canal Bridge-Lodhran	1-7-78	224·50			
Lodhran-Khanewal *via* Chord	1-4-09	55·66			
Khanewal-Lahore	24-4-65	177·50			
LODHRAN-KHANEWAL LOOP *via* SHEIKHUPURA—			757·11		
Lodhran-Muzaffarabad	1-7-73	47·61			(*a*) Transferred from E. I. Railway on 1-4-25.
Muzaffarabad-Multan Cantonment	21-8-70	6·89			(*b*) Originally constructed on the metre gauge. Converted to B. G. on 6-10-78.
Multan Cantonment-Khanewal	24-4-65	30·50			†The line was opened by sections on the 5′—6″ gauge. Thus Jhelum to Ratial 1st January 1880 (15M) and Ratial to Rawalpindi 1st October 1880 (56 miles). The diversions near Domeli were abolished on the 8th May 1882 and the 1/50 graded through line between Jhelum and Rawalpindi (70·50 miles) established. But in 1888. and subsequent years the Section was regraded to 1/100 by realignment in places. After reconstruction, the length of the section from Jhelum to Rawalpindi was 76·37 on the 31st March 1897.
DELHI-PESHAWAR CANTONMENT—			85·00		
Delhi-Ghaziabad (*a*)	1-8-64	13·41			
Ghaziabad-Meerut City	18-4-67	29·24			
Meerut City-Ambala Cantonment	1-1-69	121·68			
Ambala Cantonment-Ludhiana	12-10-69	70·22			
Ludhiana-Phillaur	14-10-70	8·28			
Phillaur-Jullundur Cantonment	1-4-70	24·12			
Jullundur Cantonment-Beas	15-11-69	25·33			
Beas-Amritsar	1-11-67	26·23			
Amritsar-Lahore	10-4-62	32·40			
Lahore-Jhelum	6-10-78	103·78			
Jhelum-Rawalpindi (*b*)	†	76·37			
Rawalpindi to mile 560·63 (between Lawrencepur and Campbellpur Cantonment).	1-1-81	43·90			
Mile 560·63 to Rumian	1-4-99	12·50			
Rumian to Attock Bridge	..	5·25			
Attock Bridge to Khairabad	31-5-83	2·75			
Khairabad-Peshawar City	1-5-82	40·98			
Peshawar City Peshawar Cantonment	1-1-83	2·65			
			639·09		
Carried over	..	..	1,481·20		


ZAHIDAN
NOK KUNDI
SPEZAND
MOHAT QUETTA
CHAMAN
FORT SANDEMAN
KHANAI
SIBI
DODAPUR
JACOBABAD
RUK
KASHMOR
LARKANA
CHACHRAN
LODHRAN SAMASATA
KUT-AL-IMARA
KHANPUR
THARUSHAH
ROHRI
MAHRABPUR
PAD-IDAN
SAKRAND
NAWABSHAH
TANDO-ADAM
KIAMARI
KOTRI
KARACHI
HYDERABAD (SIND)
BADIN
BAHAWALNAGAR
FORT ABBAS
FAZILKA
MAGLEOD GANJ RD.
BHATINDA
LANDI KHANA
LANDI KOTAL
DURGAI
PESHAWAR CANT.
KOHAT CANT.
THAL
NOWSHERA (NAUSHAHRA)
CAMPBELLPUR
JAND
HAVELIAN
BANNU
KALABAGH BRIDGE
MARI INDUS
LAKI MARWAT
MANZAI
BASAL
TAXILA
GOLRA
DAUD KHEL
MANDRA
BHAUN
KUNDIAN
DANDOT
BHERA
CHALISA
MALAK WAL
GHARIBWAL
HARANPUR
KHUSHAB
SHAHPUR CITY
SARGODHA
HUNDEWALI
CHINIOT
CHAKJHUMRA
SANGLA HILL
LALAMUSA
WAZIRABAD
SIALKOT
JAMMU (TAWI)
NAROWAL
LYALLPUR
SHAH DARA
AMRITSAR
JAISAR
CHAK AMRU
BATALA
PATHANKOT
MAHMUD KOT
GHAZI GHAT
SHORKOT RD
KHANEWAL
SHER SHAH
JARANWALA
LAHORE
RAIWIND
KASUR
FEROZEPORE CITY
FEROZEPORE CANT.
LOHIAN KHAS
KOT-KAPURA
NAKODAR
LADIAN
MUKERIAN
JOGINDER NAGAR
JULLUNDUR CITY
HOSHIARPUR
JULLUNDUR CANT.
PHAGWARA
JAIJON DOABA
NAWASHAHR DOABA
PHILLAUR
RUPAR
LUDHIANA
RAHON
DHURI
SIRHIND
SIMLA
KALKA
JAKHAL
RAJPURA
NARWANA
AMBALA CANT.
KURUKSHETRA
JAGADHRI
SAHARANPUR
KAITHAL
HISSAR
JIND
JIND CITY
ROHTAK
PANIPAT
MADLAUDA
DELHI
MEERUT CITY
GHAZIABAD
HAZRAT NIZAM-UD-DIN (DELHI)
N
N. W. RAILWAY SYSTEM.
REFERENCES.
5'-6"
2'-6" & 2'-0"
N. W. Railway
Indian State lines
Private Companies' lines
Home, Branch and Local line Junctions
Junctions connecting Foreign lines
SCALE IN MILES.
0 25 50 75 100 200 300 MILES.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*a*) North Western railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of Railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5	Remarks. 6
Brought forward ..	..	..	1,481·20		
COMMERCIAL SECTION (MAIN LINES)—*contd.*					
RAEWIND-BHATINDA—					
Raewind-Kasur	15-4-83	17·24			
Kasur-Ganda Singhwala	10-6-83	6·88			
Ganda Singwala-Hussainiwala	15-12-83 / 8-5-87	5·37			
Hussainiwala-Ferozepur City	1-10-92	2·50			
Ferozepur City-Ferozepur Cantonment ..	1-10-88	1·89			
Ferozepur Cantonment-Bhatinda	15-6-99	53·59	87·47		
SAMASATTA-BHATINDA-DELHI—					
Samasatta-Delhi Kishangunj	10-11-97	400·44			
Delhi Kishangunj-Delhi Brewery Cabin ..	1-1-12 / 1-7-12	0·80			
Delhi Brewery Cabin-Delhi Junction*	20-12-09	1·31	402·55		*Purchased by the State on 1st January 1930.
DELHI-AMBALA-KALKA†	1-3-91	162·05	162·05		†Purchased by the State on 1st April 1926.
ROHRI-RUK—					
Rohri-Sukkur	27-3-89	2·64			
Sukkur-Ruk	1-10-78	15·20			
Ruk-Miles 18·58	2-8-80	0·74	18·58		
DELHI-KILOKRI‡	15-11-04	7·79	7·79		‡Transferred from G. I. P. Railway on 1st March 1926.
Ghaziabad-Moradabad (in yard)	..	0·56	0·56		
Ghaziabad-Howrah (in yard)	..	0·50	0·50		
Meerut City—E. I. Rly. Line.	..	0·58	0·58		
KHANALAMPURA-SAHARANPUR	..	1·90	1·90	2,163·18	
COMMERCIAL SECTION (BRANCH LINES)—					
KOTRI-DADU-RUK—					
Kotri-Laki	8-10-78	75·48			
Laki-Radhan	27-10-78	71·28			
Radhan-Ruk	1-10-78	63·42	210·18		
HYDERABAD-BADIN	15-8-04	61·70§	61·70		§This length was dismantled during the war and re-opened in sections on 9-1-1922 and 13-3-1922.
SIND LEFT BANK FEEDER RAILWAYS—					
Tando Adam-Nawabshah	10-12-31	53·80			
Sakrand-Tharushah	10-12-31	65·73			
Padidan-Mehrabpur	20-5-30	43·31	162·84		
SUTLEJ VALLEY EXTENSION—					
Lodhran-Kasur (c)	6-7-10	212·68	212·68		(c) The line was dismantled during the war and was relaid and re-opened as follows:— Kasur to Pakpattan 86·80 miles on 15th March 1923. Mailsi to Lodhran 40·08 miles on 18th March 1924. Pakpattan to Mailsi 85·90 miles on 23rd November 1925.
LUDHIANA EXTENSION—					
Ludhiana—Ferozepur Cantonment	10-6-05‖	75·90			‖ For Goods traffic. For passenger traffic—1st October 1905.
Ferozepur City—McLeodganj	10-2-06	77·45	153·35		
JULLUNDUR DOAB EXTENSION—					
Jullundur City—Kapurthala	23-6-12¶	12·72			¶For goods traffic. For passenger traffic—1st January 1913.
Kapurthala—Sultanpur Lodi	26-8-12¶	15·53			
Sultanpur Lodi—Lohian Khas	1-1-13	4·48			
Lohian Khas—Gidarpindi	10-1-14	4·39			
Gidarpindi—Makhu	**14-4-14	10·00			**For goods traffic. For passenger traffic — 1st May 1914.
Makhu-Ferozepur Cantonment	11-8-13	25·86	72·98		
PHILLAUR-LOHIAN KHAS—	1-6-13	39·22	39·22		
JULLUNDUR CITY—NAKODAR	††30-5-14	19·82	19·82		††For goods traffic. For passenger traffic—15th June 1914.
KHANEWAL-WAZIRABAD—					
Khanewal-Toba Tek Singh	16-4-00	55·53			
Toba Tek Singh—Lyallpur	22-6-99	49·00			
Lyallpur-Sangla Hill	15-2-96	27·21			
Sangla Hill—Hafizabad	1-1-96	31·45			
Hafizabad-Wazirabad	15-8-95	37·53	200·72		
SHAHDARA-SANGLA HILL	10-4-07	56·21	56·21		
Carried over ..	..	..	1,189·70		

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*a*) North Western railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5	Remarks. 6
Brought forward ..	..	..	1,189·70		
COMMERCIAL SECTION (BRANCH LINES)—*contd.*					
Jakhal-Hissar	1-11-13	50·42	50·42		
Narwana-Kurukshetra—					
Narwana-Kaithal	1-2-99*	23·56			*For goods traffic. For passenger traffic 8th March 1899.
Kaithal-Kurukshetra	1-12-10	29·76	53·32		
Jind-Panipat—					
Jind Junction—Jind City	7-8-16	2·84			
Mile 28·78-Panipat	1-11-16	14·77	17·61		
Rohtak-Panipat	15-6-28	44·01	44·01		
Jullundur Cantonment—Hoshiarpur ..	16-6-13	22·86	22·86		
Amritsar-Pathankot—					
Amritsar-Dina Nagar	1-1-84	51·04			
Dina Nagar-Pathankot	8-6-84	15·48	66·52		
Batala-Qadian	20-12-28	12·08	12·08		
Verka-Narowal—					
Verka-Dera Baba Nanak	4-5-27	27·80			
Dera Baba Nanak-Jassar	6-5-29	5·29			
Jassar-Narowal	21-12-27	5·74	38·83		
Jassar-Chak Amru	21-12-27	26·66	26·66		
Shahdara-Narowal	21-12-26	48·33	48·33		
Wazirabad-Suchetgarh—					
Wazirabad-Sialkot	1-1-84	26·55			
Sialkot-Suchetgarh	15-3-90	9·08	35·63		
Shorkot Road—Qila Sheikhupura—					
Shorkot Road—Jaranwala	2-5-11	87·94			
**Jaranwala-Qila Sheikhupura	18-11-09	49·20	137·14		**The change is due to shifting junction arrangements from Chichkoki Mallian to Qila Sheikhupura.
Lyallpur-Jaranwala—	3-12-27	20·75	20·75		
Shorkot Road—Malakwal—					
Shorkot Road—Sargodha	14-5-06	102·56			
Sargodha-Malakwal	1-4-03	46·58	149·14		
Chak Jhumra-Hundewali—					
Chak Jhumra-Mile 20·50	29-1-28	20·50			
Mile 20·50—Hundewali	10-1-29	22·31	42·81		
Sargodha-Khushab	20-3-29	28·22	28·22		
Taxila-Havelian	7-11-13	34·69	34·69		
Moghalpura-Lahore Cantonment West ..	..	2·19	2·19		
Grand Total ..	..	..		2,020·91	
STRATEGIC SECTIONS—					
1. Baluchistan Railways (Main Lines)—					
Ruk-Chaman (Bolan Route)—					
Ruk-Sibi	2-5-1880	133·48			
Sibi-Quetta	†1-5-1882 / 20-3-1887	87·57			† These are the dates of opening on the old alignment. Damage by flood rendered realignment necessary in parts. This was done by 15-4-1897.
Quetta-Bostan	21-8-87	20·44			
Bostan-Killa Abdulla	25-1-88	38·63			
Killa Abdulla-Chaman	1-1-92	29·26			
Chord Past Ruk‡	18-7-25	0·49			‡ Line maintained, points and signals disconnected but in position.
Chord Past Bostan	1-1-98	0·31	310·18		
2. N. W. F. P. Railways—					
Peshawar Cantt.—Landi Khana—					
Peshawar Cantt. Jamrud	1-1-01	10·98			
Jamrud-Landi Kotal	3-11-25	20·69			
Landi Kotal-Landi Khana (*d*)	3-4-26	5·00	36·67		(*d*) Closed to Traffic on 15th December 1932.
Total Strategic (Main) ..				346·85	

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*a*) North Western railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5	Remarks. 6
1. Baluchistan Railways (Branch Lines)—					
Sibi-Bostan (Harnai Route)—					
Sibi-Sharigh	20-3-87	73·78			
Sharigh-Bostan	21-8-87	60·47			
			134·25		
Spezand-Zahidan (Nushki Railway and its extension)—					
	15-11-05	83·05			
Spezand-Nushki Extension .. Nushki-Dalbandin* ..	1-2-27	114·91			* Nushki to Nok Kundi (219·03 miles) remains open. From Nok Kundi to Zahidan (formerly called Duzdop) closed to Traffic on 10th July 1931.
Dalbandin-Mirjawa* ..	1-10-20	189·50			
Mirjawa-Zahidan* ..	1-10-22	52·62			
			440·08		
2. N. W. F. P. Railways (Branch Lines)—					
Nowshera-Durgai—					
Nowshera-Takhat Bhai†	1-1-01	23·38†			† Converted from N. G. to B. G. on 26th September 1921.
Takhat Bhai-Durgai‡	..	17·22			‡ Converted from N. G. to B. G. on 30th March 1922.
			40·60		
3. Punjab Railways (Branch Lines)—					
Sind Sagar Line—					
Lalamusa-Kundian—					
Lalamusa-Bahaud Din	1-1-80	28·50			
Bahaud Din-Hariah	1-2-80	10·51			Converted from M. G. to B. G. on 10th February 1886.
Hariah-Malakwal	10-4-80	5·95			
Malakwal-Kundian	15-8-87	112·04			
			157·00		
Shershah-Campbellpur—					
Shershah-Chenab East Bank	1-1-89	2·53			
Chenab East Bank-Chenab West Bank ..	1-2-90	2·18			
Chenab West Bank-Bhakkar	22-1-87	120·03			
Bhakkar-Kundian	15-8-87	63·25			
Kundian-Daud Khel	15-3-92	30·34			
Daud Khel-Jand	1-4-99	54·88			
Jand-Basal	16-4-81	16·47			
Basal-Campbellpur	1-4-99	19·52			
			309·20		
Malakwal-Bhera—					
Malakwal-Miani	10-4-80	8·71			Converted from M. G. to B. G. on 15th March 1887.
Miani-Bhera	2-2-82	9·01			
			17·72		
Chalisa-Dandot—					
Chalisa-Khewra	1-1-83§	6·90			§ The date of opening of the original 3′— 3½″ gauge line. Subsequently converted to and opened on the 5′—6″ gauge.
Khewra-Dandot‖	1-1-83	..			‖ Khewra to Dandot (1·58 miles) is closed to public traffic and treated as a Siding.
			6·90		
Sind Sagar Line.					
Daud Khel-Mari Indus	15-3-92	6·16			
			6·16		
Golra-Basal	1-4-81	47·00			
			47·00		
Jand Kohat—					
Jand-Khushalgarh	16-4-81	5·50			
Khushalgarh-Kohat ¶	25-5-02	32·24			¶ Converted from 2′—6″ to 5′—6″ gauge on 5th January 1908.
			37·74		
Mahmud-Kot-Ghazighat	1-4-87	10·95			
			10·95		
Total Strategic Branch ..				1,207·60	

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*a*) North Western railway (5′ 6″ gauge)—*contd.*

Progress in opening—*contd.*

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5	Remarks. 6
COMMERCIAL SECTION—DOUBLE LINES—					
Between Kiamari and Lahore—					
Kiamari-Karachi City	30-6-97	3·07			
Karachi City-Karachi Cantonment	15-5-61	2·30			
Karachi Cantonment-Pipri	20-6-97	21·45			
Pipri-Kotri	3-5-98	80·67			
Gidu-Hyderabad	1-4-13	3·56			
Hyderabad-Shahdadpur	1-7-15	45·60			
Shahdadpur-Nawabshah	27-11-19	26·10			
Nawabshah-Kot Laloo	25-2-20	32·09			
Kot Laloo-Khairo	27-11-19	3·25			
Khairo-Chahi	20-5-14	6·74			
Chahi-Begmanji	20-1-21	62·16			
Begmanji-Janvari	20-5-14	4·11			
Janvari-Rohri	21-6-12	3·70			
Rohri-Reti	1-6-07	70·00			
Reti-Khanpur	3-4-07	62·00			
Khanpur-Samasatta	2-4-07	77·85			
Samasatta-Adamwahan Bridge	1-4-09	10·61			
Adamwahan Bridge-Adamwahan	20-10-30	2·52			
Adamwahan-Lodhran	1-4-09	6·13			
Raewind-Lahore	16-7-12	24·42	548·33		
Between Delhi and Peshawar Cantonment—					
Delhi-Ghaziabad	20-2-02	13·41			
Saharanpur-Kalanaur	13-5-13	15·97			
Kalanaur-Ambala	15-11-13	35·01			
Ambala-Rajpura	2-12-10	17·25			
Rajpura-Sirhind	15-12-10	15·75			
Sirhind-Gobindgarh	10-1-11	5·00			
Gobindgarh-Doraha	15-12-10	17·04			
Doraha-Ludhiana	10-1-11	14·71			
Ludhiana-Phagwara	11-6-11	23·30			
Phagwara-Jullundur Cantonment	20-4-11	10·22			
Jullundur Cantonment-Hamira	13-3-10	15·95			
Hamira-Dhilwan	12-9-11	6·83			
Dhilwan-Beas	28-2-14	1·99			
Beas-Butari	10-12-10	6·85			
Butari-Jandiala	19-7-10	7·80			
Jandiala-Amritsar	23-3-10	11·28			
Amritsar-Lahore	15-1-06	32·40			
Lahore-Badami Bagh	18-10-09	2·25			
Badami Bagh-Shahdara	8-1-10	2·88			
Chaklala-Rawalpindi	29-8-28	2·64			
Rawalpindi-Golra	14-2-20	9·51	268·04		
Carried over ..			816·37		

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*a*) North Western railway (5′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5	Remarks. 6
Brought forward ..	..	..	816·37		
Between Raewind and Bhatinda—					
Ferozepore City-Ferozepore Cantonment ..	25-5-23	2·79	2·79		
Delhi-Kishanganj-Delhi Brewery Cabin (*e*) ..	1-1-12 / 1-7-12	0·80			(*e*) Purchased by the State on 1-1-1930.
Delhi Brewery Cabin-Delhi Junction	20-12-09	1·24	2·04		
Delhi Brewery Cabin-Subzimandi	1-3-91	0·78	0·78		
A. D. C. Cabin-New Delhi	1912	1·79	1·79		
, Total Commercial ..	..	..	..	823·77	
Strategic Section-Double Lines—					
Between Ruk and Chaman (Bolan Route).					
Abi-i-Gum-Kolpur	20-9-92	22·78			
Gulistan-Chaman		38·48			
			61·26		

Details of construction—

(*i*) *Permanent way.*—On the main line, the rails are mainly 90 lbs. F. F. (B. S. S. & R.) but 75 lbs. F. F. (B. S. S. & R.) with 84 and 85 lbs. D. H. and 88½ lbs. B. H. and 87 lbs. and 100 lbs. F. F. have also been laid.

On the branch lines, the rails are 60, 62 and 75 lbs. B. S. S. and R. all of the F. F. type but 64, 68, 73, 75, 77½ and 85 lbs. rails of the B. H. or D. H. type have also been laid. Some of the 75 lbs. F. F. rails are of the 1887 and 1892 types

Wooden sleepers of deodar, treated and untreated, with treated fir, Kail and Chir sleepers have been largely used but hard wood sleepers like teak, sal, Jarrah, Asna and Burmese have also been put in. In addition metal sleepers consisting of C. I. plates of various designs and steel troughs have been widely used. C. I. pots and R. C. plate sleepers are also laid in small lengths. Bearing plates are used on soft wood sleepers.

(*ii*) *Ballast.*—The line is ballasted with broken stones, shingle or broken brick, except the sections Jullundur City to Ferozepur Cantt., Lohian Khas to Phillaur and Nakodar to Jullundur City which are sand and brick ballasted. The branch line sections opened in and after 1927 are mainly earth packed. On these, ballast has been provided for the points and crossings, approaches to bridges and level crossings, as also for the section Shahpur City to Khushab and one mile of the section Chak Jhumra to Chhini Khinchi.

(*iii*) *Fencing.*—On the main line, the sections Karachi-Landhi Kotri to Khanpur, Rohri to Jacobabad, Ferozepur City to Ferozepur Cantt., and Delhi to Kilokri are fenced.

The sections Delhi-Lahore (*via* Saharanpur) to Jamrud, Delhi-Umbala-Kalka, Lahore to Montgomery and Raewind to Bhatinda are fenced along part of their lengths.

Of the branch lines, the section Kotri-Dadu-Ruk is fully fenced and the sections Wazirabad to Jammu, Amritsar to Pathankot, Sialkot Narowal to Chak Amru, Jhang Maghiana to Malakwal, Bhakkar to Campbellpur, Nowshera to Durgai and Rajpura to Bhatinda, along part of their lengths.

The rest is unfenced.

(*iv*) *Curves.*—The sharpest curve on the commercial section is 819′ radius and on the strategic section 455′ radius.

(*v*) *Gradients.*—On the Commercial section, the ruling gradient is 1 in 300 but there are important exceptions such as the section Umbala to Kalka which is 1 in 40, Lahore to Peshawar Cant. which is 1 in 100 and a part of the Lahore-Karachi main line which is 1 in 150. Some of the commercial branch lines are also graded steeper than 1 in 300 such as the Taxila-Havelian which is 1 in 50, the Kotri-Dadu loop which is 1 in 150, the section Amritsar to Pathankot which is 1 in 170 and the sections Ferozepur Cant. to Ludhiana, Jullundur Cant. to Hoshiarpur and Wazirabad to Miran Sahib which are 1 in 200.

The ruling gradient on the strategic section is 1 in 100 on the main line and 1 in 83 on the branch lines. The important exceptions are 1 in 25 on the sections Sibi to Kolpur and Peshawar Cant. to Landi Kotal, 1 in 40 on the sections Gulistan to Chaman and Sibi to Bostan *via* Sharigh, 1 in 50 on the sections Spezand to Ahmedwal, Jand to Nak band and Chalisa to Dandot, and 1 in 70 on the Golra Basal section.

12. NORTH WESTERN RAILWAY SYSTEM—*contd*

(*e*) North Western railway (5′ 6″ gauge)—*concld.*

Contract—

Nil.—The line is owned and worked by the State.

Rates and fares.—Certain maxima and minima have been fixed by the Government, between the limits of which the Railway Administration can vary the rates and fares quoted for goods and coaching traffic.

Statistics of working. (Those for the periods prior to 1886 will be found in Appendix 38 to the Railway Administration Report for 1907.)—

Includes the Kohat-Thal, Nowhsera-Durgai, Trans-Indus Kalabagh-Bannu, Zhob Valley, Kangra Valley, Khyber Railway, the Delhi(New Capital) Railway works from their dates of opening, the Kalka Simla Railway from 1907, the D. U. K. Railway from 1926-27, the Southern Punjab Railway from 1929-30 and the Amritsar-Patti-Kasur Railway from 1935-36.

The statistics for Kalka-Simla, Kangra Valley, Trans-Indus (Kalabagh-Bannu), Zhob Valley, Kohat Thal, and D. U. K. and Southern Punjab Railways are also shown separately in tables m, n, o, p, q, u to y respectively.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings	Net earnings.	Percentage of net earnings on total capital outlay, or capital at charge, given in column (3).	Government share of surplus profits *less* payments made on account of rebate.	Total income (column 5 + column 7).	Percentage of total income on total capital outlay or capital at charge, given in column 9).	Interest.	Annuity and sinking Fund.	Gain or loss to the State *pertaining to each year.*	*Commercial section.* Earnings per mile per week.	*Commercial section.* Pro. of exp. to earnings.	*Military section* Earnings per mile per week.	*Military section* Pro. of exp. to earnings.	*Entire line.* Earnings per mile per week.	*Entire line.* Pro. of exp. to earnings.
1	2		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs		Rs.		Rs.	
1886	1,850·78	36,09,90,705	2,53,60,901	1,19,92,839	3·32	..	1,19,92,839	3·32	1,22,44,189	44,63,692	—47,15,042	..	..	..	..	261	52·49
1887	2,398·79	38,37,70,872	2,10,03,388	57,77,585	1·51	..	57,77,585	1·51	1,21,75,004	60,12,097	—1,24,09,516	..	..	..	..	182	72·33
1888	2,441·73	39,71,81,200	2,57,79,305	83,66,598	2·11	..	83,66,598	2·11	1,32,33,878	60,30,818	—1,08,98,096	..	..	..	..	202	67·97
1889	2,442·10	40,94,31,603	2,82,06,820	1,02,84,741	2·51	..	1,02,84,741	2·51	1,37,30,757	60,44,523	—94,90,543	290	56·53	90	107·75	224	63·85
1890	2,465·78	41,83,37,620	2,73,99,035	1,02,57,601	2·45	..	1,02,57,601	2·45	1,30,94,328	60,56,580	—88,63,307	283	54·95	88	110·72	219	62·36
1891	2,465·99	42,15,91,411	3,25,78,355	1,21,32,521	2·88	..	1,21,32,521	2·88	1,40,17,753	60,55,088	—79,40,320	344	55·60	88	122·41	261	62·08
1892	2,526·06	13,00,61,140	2,64,35,665	94,50,960	2·20	..	94,50,960	2·20	1,53,19,708	60,90,398	1,19,59,146	280	55·58	70	131·08	208	64·25
1893	2,573·23	43,99,74,051	2,92,68,732	97,97,643	2·23	..	97,97,643	2·23	1,57 52,707	61,07,520	—1,20,62,584	313	60·20	69	122·71	230	66·03
1894	2,528·21	45,06,76,395	3,23,14,097	1,28,25,181	2·85	..	1,28,25,181	2·85	1,66,97,619	61,24,995	—99,97,343	347	53·11	76	122·95	253	60·51
1895	2,575·90	46,56,84,932	3,52,18,382	1,64,46,998	3·53	..	1,64,46,998	3·53	1,76,78,888	61,42,290	—73,71,580	379	46·70	75	116·14	274	53·13
1896	2,713·91	48,10,61,362	2,94,41,749	1,18,86,409	2·47	..	1,18,86,409	2·47	1,77,38,623	61,40,392	—1,19,92,606	202	54·68	75	97·77	220	59·55
1897	2,817·02	49,07,95,756	3,29,03,445	1,49,78,897	3·05	—19,942	1,49,58,955	3·05	1,74,81,023	61,74,466	—86,76,534	302	49·70	72	93·76	225	54·33
1898	2,817·64	49,65,81,389	3,76,01,912	1,85,74,360	3·74	..	1,85,74,360	3·74	1,75,08,032	61,68,676	—51,02,048	354	45·98	61	101·26	256	50·80
1899	2,944·80	50,27,26,360	3,52,21,759	1,60,89,223	3·20	—17,318	1,60,71,905	3·20	1,74,00 104	62,01,503	—75,29,702	326	47·73	58	121·43	232	54·32
1900	3,005·67	50,85,96,582	3,15,22,237	1,32,19,151	2·60	—3,562	1,32,15,589	2·60	1,77,73,246	62,28,600	—1,07,86,257	275	52·34	60	107·61	202	58·02
1901	3,117·37	51,54,17,599	4,11,89,277	2,03,56,471	3·95	1,73,653	2,05,30,124	3·98	1,79,28,422	62,67,660	36,65,905	350	61·41	69	99 55	255	50·22
1902	3,147·45	52,81,86,554	4,22,19,927	1,73,70,094	3·29	41,522	1,74,11,616	3·30	1,83,11,215	62,92,185	—71,91,784	360	53·03	67	112·42	262	58·02
1903	3,255·74	53,53,09,487	4,93,83,876	2,50,08,517	4·67	81,050	2,50,89,567	4·69	1,86,14,401	63,03,090	+1,72,076	421	44·42	65	106·94	214	49·36
1904	3,317·54	55,14,60,717	6,16,56,310	3,22,92,909	5·86	2,22,023	3,25,14,932	5·90	1,91,66,599	63,28,191	+70,20,140	519	42·29	75	118·47	361	47·60
1905	3,400·83	57,66,87,197	5,86,74,943	2,90,52,383	5·04	4,28,070	2,94,80,453	5·11	1,98,67,211	63,48,855	+32,64,387	483	46·65	75	94·82	388	50·46
1906	3,503·69	60,67,74,838	6,18,66,041	2,93,40,919	4·84	5,33,840	2,98,74,759	4·93	2,09,23,062	63,75,451	+25,76,248	495	44·22	77	101·07	343	52·57
1907	3,614·89	64,67,43,048	7,04,86,241	3,38,51,329	5·23	7,48,270	3,45,99,599	5·35	1,80,21,576	64,03,423	+1,01,74,584	534	47·21	78	112·78	375	51·93
1908	3,618·10	69,00,11,581	5,61,66,152	†93,38,475	1·35	6,35,068	99,73,543	1·45	2,07,78,063	64,32 861	—1,72,37,179	413	76·58	81	148·06	298	83·84
1909	3,723·91	72,31,90,764	6,79,03,754	2,13,69,240	2·95	3,37,037	2,17,06,277	3·00	2,17,68,497	64,63,207	—65,25,427	499	62·52	79	140·79	356	68·48
1910	3,725·89	73,64,05,633	7,41,00,787	2,51,73,007	3·41	5,83,661	2,57,56,668	3·50	2,21,38,011	64,95,060	—28,76,403	534	61·59	82	122·51	382	65·99
1911	3,818·22	75,46,44,149	7,93,87,066	3,12,68,435	4·15	4,49,374	3,17,17,809	4·14	2,13,95,920	64,30,310	+19,91,579	567	56·26	86	117 39	402	60·61
1912	3,812·29	78,05,55,336	9,06,27,413	4,37,15,957	5·60	6,82,983	4,43,98,940	5·68	2,40,77,923	65,66,707	+1,37,54,310	638	48·12	91	100·16	466	51·76
1st qr. of 1913	3,814·97	79,99,81,406	2,00,25,197	50,07,044	0·62	—71,483	49,35,561	0·62	60,87,834	16,46,404	—27,98,681	559	70·99	83	130·03	402	75·06
1913-14	4,011·02	83,24,56,549	8,67,13,050	3,67,40,434	4·41	7,50,767	3,74,91,201	4·50	2,54,72,615	66,15,780	+54,02,806	574	54·31	98	99·30	423	57·68
1914-15	4,010·48	85,87,48,950	8,17,13,591	3,05,18,372	3·55	3,43,414	3,08,61,786	3·59	2,72,31,643	66,58,630	—30,28,687	518	59·38	111	96·27	319	62 61
1915-16	4,009·33	86,38,39,993	8,41,06,745	3,05,63 798	4·17	45,324	3,61,09,117	4·18	2,75,45,695	67,08,420	+18,55,002	531	53·86	118	80·33	402	57·12
1916-17	4,057·98	87,37,14,828	9,83.15 253	5,10,32,430	5·84	1,72,266	5,12,04,696	5·86	2,61,62,271	73,35,165	+1,71,07,260	615	44·80	131	82·74	466	48·00
1917-18	§3,987·72	87,17,78,646	12,20,98,589	6,97,52,991	8·00	6,10,873	7,03,63,864	8·07	2,76,85,824	73,89,570	+3,52,88,470	769	39·73	160	76·50	580	42·87
1918-19	4,102·25	92,34,32,995	12,46,05,784	5,79,84,201	6·28	13,75,288	5,93,59,489	6·62	2,81,88,129	68,95,590	+2,42,75,770	784	49·61	198	87·92	599	53·47
1919-20	4,082·65	95,77,56,175	12,41,58,600	4,45,06,754	4·80	10,17,582	4,55,24,336	4·75	3,53,50,288	69,65,490	+32,08,558	966	58·39	232	106·36	600	63·75
1920-21	4,281·78	‡1,01,97,25,000	13,04,76,615	3,01,96,979	2·96	5,91,864	3,07,88,843	3·19	3,55,88,364	54,59,461	—1,02,58,982	798	71·74	206	112·32	580	76·86
1921-22	4,413·50	‡1,06,02,64,000	13,01,62,187	40,56,370	0·38	10,63,989	51,20,359	0·48	3,44,88,400	73,18,817	—3,66,86,858	785	89·23	214	149·82	581	96·88
1922-23	4,404·83	‡1,08,56,31,000	14,46,55,502	2,14,51,527	1·98	6,88,604	2,21,40,131	2·04	3,54,98,642	72,98,857	—2,06,52,368	884	78·19	187	143·20	632	85·17
1923-24	4,403·74	‡1,11,53,07,657	15,05,54,298	4,06,42,396	3·64	20,76,534	4,27,18,930	3·83	3,73,98,549	70,88,710	—17,68,329	912	68·16	204	110·88	654	78·70
1924-25	4,400·70	‡1,12,67,75,000	17,07,58,673	5,68,49,455	5·04	24,01,038	5,92,50,495	5·26	4,18,56,507	(*a*)	+1,73,93,988	1,080	60·95	186	122·45	744	66·80
1925-26	4,505·69	‡1,15,92,75,000	15,38,56,874	4,54,74,843	3·92	29,56,539	4,84,31,412	4·18	4,31,09,354	..	+53,22,058	951	76·45	188	118·97	657	70·44
1926-27	4,803·15	‡1,25,48,91,000	15,82,64,609	4,40,18,237	3·51	22,02,917	4,62,21,154	3·69	4,58,11,635	..	—4,09,521	918	64·48	168	122·32	637	72·00
1927-28	4,946·00	‡1,33,10,48,000	16,53,77,200	4,67,23,629	3·51	23,36,353	4,90,59,982	3·69	5,03,31,082	..	—12,71,100	913	66·45	173	121·44	646	71·75
1928-29	5,195·95	‡1,34,75,99,216	15,99,28,419	3,87,74,696	2·88	26,12,200	4,13,86,896	3·07	5,48,08,685	..	—1,34,21,789	824	70·78	170	119·25	500	75·75
1929-30	6,122·25	‡1,46,09,24,690	17,09,02,823	3,35,02,072	2·63	45,68,558	4,30,70,630	2·95	5,79,43,309	..	—1,48,72,679	698	73·15	164	130·92	535	76·20
1930-31	6,160·34	‡1,47,84,94,835	16,32,02,059	2,79,53,339	1·89	3,20,041	2,82,73,380	1·91	6,32,12,648	..	—3,49,39,268	662	76·06	152	147·16	508	81·20
1931-32	6,298·16	‡1,48,36,74,141	14,62,76,295	2,74,46,784	1·85	2,01,278	2,76,48,062	1·86	6,33,67,505	..	—3,57,19,443	573	75·55	136	137·72	444	81·24
1932-33	6,157·11	‡1,47,64,02,679 (*b*)	14,13,04,319	2,39,06,660	1·62	7,75,695	2,46,82,355	1·67	6,26,24,639	..	—3,79,42,284	491	76.41	143	140·00	405	82·17
1933-34	6,155·82	‡1,47,87,11,663 (*b*)	14,70,87,357	2,90,18,669	1·96	6,87,036	2,97,05,705	2·01	6,17,73,000	..	—3,17,52,474	581	74·05	141	146·61	458	80·27
1934-35	6,158·36	‡1,46,84 32,281 (*b*)	15,29,57,786	3,23,31,004	2·20	6,53,388	3,29,84,392	2·25	6,01,27,386	..	—2,71,42,994	606	71·69	142	149·70	477	78·86
1935-36	6,206·12	‡1,46,92,92,100 (*b*)	15,93,96,691	4,19,08,945	2·85	6,41,540	4,25,50,485	2·90	5,91,27,396	..	—1,65,76,911	622	65·87	150	153·56	491	73·71
6-37	6,207·22	‡1,46,84,36,453 (*b*)	17,06,61,344	5,45,64,785	3·72	5,59,711	5,51,24,496	3·75	5,79,92,081	..	—28,67,585	670	60·93	158	145·62	527	68·03
1937-38	6,207·22	‡1,47 20,08,721	16,88,07,325	4,96,24,375	3·37	4,57,822	5,00,82,197	3·40	5,76,43,077	..	—75,60,880	659	64·01	162	180·14	522	70·60
1938-39	6,192·64	1,47,59,08,156	16,39,33,576	4,49,30,430	3·04	8,29,856	4,57,60,286	3·10	5,75,36,782	..	—1,17,76,496	645	65·78	147	145·18	507	72·50

* Revised figure.

† The decrease in net earnings in 1908 was due chiefly to extraordinary charges incurred in the repairs of flood damages, accentuated by a fall in the gross earnings consequent upon the failure of the wheat export trade from Karachi and the diminution of traffic generally owing to famine and expensive breaches of the line caused by floods.

‡ Including premia paid by Government in the purchase of the line.

§ The decrease was due to the dismantling of the Hyderabad-Badin section.

(*a*) The Capital Account was permanently debited with the balance of capital liability outstanding on 31st March 1924 in respect of the purchase of the railway and redemption by annuities and sinking fund on which full interest is charged in column 10.

(*b*) The amount of Sterling liabilities involved in the purchase of railways included in the figures shown against 1933-34 and 1934-35 has been converted at the rates of exchange ruling at the time when the liabilities came into being as against the statutory rate of exchange—*i.e.*, 1*s.* 6*d.* previously adopted. From the year 1935-36 onwards the same amount has been reconverted at the latter rate.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*b*) **Amritsar-Patti-Kasur railway** (5′ 6″ gauge)—

Agents—Messrs. Killick, Nixon & Co., Bombay.

Date of registration of the Company.—12th April 1905.

Progress in opening—

Sections of railway.	Date of opening	Miles.	Total.
1	2	3	4
Amritsar to Tarn Taran	21-9-06	15·00	
Tarn Taran to Patti	30-12-06	12·05	
Patti to Kasur	4-4-10	27·76	
TOTAL	..	..	54·81

Details of construction—

Permanent way.—The permanent way consists of 75-lb. flat-footed British standard steel rails laid on deodar, chir, fir and kail treated sleepers with bearing plates.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—Station yards only are fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 500.

Agreements and Contracts—

Agreement, dated the 21st March 1905 *between the Secretary of State and Messrs. Killick, Nixon and Company of Bombay*, as to the formation and establishment of the Amritsar-Patti Railway Company.

Contract, dated the 22nd May 1905, *between the Secretary of State and the Amritsar-Patti Railway Company*, as to the construction, maintenance and working of the Amritsar-Patti railway.

Agreement, dated the 17th March 1909, *between the Secretary of State and the Amritsar-Patti Railway Company*, as to the raising of capital and execution of contract in connection with the construction of the Patti-Kasur extension.

Agreement, dated the 7th May 1909 *between the Secretary of State and the Amritsar-Patti Railway Company*, as to the reduction of the capital amount.

Contract, dated the 7th May 1909, *between the Secretary of State and the Amritsar-Patti Railway Company*, as to the construction, maintenance, management and working of the Patti-Kasur extension as an integral part of the Amritsar-Patti railway.

Railway Board's letter No. 92-994-P., dated the 26th March 1915, sanctioning an additional (nominal Debenture) capital of 10 lakhs.

Contract, dated the 28th October 1915 (supplemental to the contract of 1905 and 1909), *between the Secretary of State and the Amritsar-Patti Railway Company*, as to the adoption of the Government financial year for the preparation of accounts, etc.

Main provisions of agreements and contracts—

(i) *Land.*—Provided by the Government free of cost to the Company, except for quarrying ballast brickfields, other kindred purposes and temporary works.

(ii) *Government aid.*—The Government constructed the line (from funds supplied by the Company whose property it is), and manage, maintain, stock and work it, through the agency of the North Western railway.

By way of rebate the Government allow the Company, in respect of each year, such a sum, up to 45 per cent. of the gross earnings from traffic (excluding those derived from the carriage of stores) interchanged between the North Western railway and the Amritsar-Patti railway, as shall, together with the net earnings of the Company, make up an amount equal to an interest for the year at a rate of 5 per cent. per annum on the actual expenditure charged in the capital account and at $4\frac{3}{4}$ per cent. on the amount of debentures, as also, up to the same limit, Rupees 7,200 on account of office expenses and expenses of management and direction. They also allow all such legal expenses as may be properly incurred by the Company and approved by the Secretary of State or the Government of India and as are debitable to Revenue.

(iii) *Terms of working.*— } For management, maintenance, working and provision of rolling
(iv) *Distribution of profits.*— } stock, the Government retain 45 per cent. of the gross earnings in each year of the Amritsar-Patti railway ; the remainder, constituting the net earnings, is paid to the Company.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*b*) Amritsar-Patti-Kasur railway (5′ 6″ gauge)—*concld*

Main provisions of agreements and contracts—*concld.*

But should the net earnings of the Company in any year exceed the minimum amount sufficient to pay a dividend of 5 per cent. per annum, on the paid-up share capital and 4¾ per cent. on the amount of debentures, such excess is to be applied towards the payment of office expenses, and expenses of management and direction [referred to under (ii)] up to a limit of Rs. 15,000 the balance being divided equally between the Government and the Company.

(v) *Rates and fares.*—To be arranged between the Government and the working agency within the maximum and minimum in force on, and the classification of goods to be in conformity with that of the North Western railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—

} To be conveyed at the same rates and under the same arrangements as apply to State railways.

(vii) *Power of the Government to determine contract.*—The Government may, by giving twelve months previous notice of purchase, determine the contract either on the 31st December 1935 or on the 31st December in the last year of any subsequent period of 10 years, by paying to the Company in rupees 25 times the average yearly net earnings of the Company during the three years immediately preceding the date of determination, subject to a limit of 20 per cent. in excess of but not less than the total capital expenditure of the Company.

Note:—The Government determined the contract on the 31st December 1935.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vii)].—Not specified.

Statistics of working—

Note:—From 1935-36, the figures are included in the Statistic of working of the N. W. Rly. (5′ 6″ Gauge).

Year.	Milcage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Government share of surplus profits.	Total income (column 5—column 7).	Percentage of total income on total capital outlay in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1906 .	27·49	11,90,961	15,368	8,452	0·71	..	8,452	0·71	69	45·00
1907 .	27·49	14,19,465	1,61,280	88,704	6·25	3,726	84,978	5·99	113	45·00
1908 .	27·49	14,87,400	1,79,461	98,703	6·63	4,852	93,851	6·24	126	45·00
1909 .	27·60	17,88,129	2,18,569	1,20,103	6·72	15,957	1,04,146	5·82	152	45·00
1910 .	54·26	26,67,469	3,64,322	2,00,378	7·51	30,922	1,69,456	6·35	146	45 00
1911 .	54·26	28,68,452	4,70,792	2,58,986	9·02	49,275	2,09,661	7·31	167	45·00
1912 .	54·26	28,70,826	5,24,419	2,88.431	10·03	61,317	2,27,114	7·91	186	45·00
1st qr. of 1913 .	54·26	28,85,320	1,48,642	81,753	2·83	..	81,753	2·83	210	45·00
1913-14 .	54·26	29,55,802	7,41,391	4,07,765	13·79	78,965	3,28,800	11·12	203	45·00
1914-15 .	54·26	32,49,902	7,02,381	3,86,310	11·89	1,19,964	2,66,346	8·19	249	45·00
1915-16 .	54·26	34,04,702	6,79,328	3,73,630	10·97	1,49,118	2,24,512	6·59	239	45·00
1916-17 .	54·26	33,96,686	6,69,598	3,68,278	10·84	87,722	2,80,556	8·26	237	45·00
1917-18 .	54·26	34,05,991	4,98,312	2,74,071	8·05	40,982	2,33.089	6·84	177	45·00
1918-19 .	54·26	31,25,808	5,33,274	2,93,300	9·38	53,969	2,39,331	7·65	189	45·00
1919-20 .	54·26	34,11,029	5,66,123	3,11,368	9·12	63,029	2,48,339	7·28	201	45·00
1920-21 .	54·26	34,27,478	7,45,072	4,09,790	12·00	1,12,942	2,96,848	9·69	264	45·00
1921-22 .	54·26	34,48,157	7,91,845	4,35,515	12·63	1,25,917	3,09,598	8·98	281	45·00
1922-23 .	54·26	34.61,494	8,95,128	4,92,320	14·22	1,45,766	3,46,554	10·01	317	45·00
1923-24 .	54·26	34,43,152	9,36,951	5,15,323	14·97	1,56,951	3,58,372	10·41	332	45·00
1924-25 .	54·26	34,89,689	10,84,589	5,96,524	17 09	1,97,313	3,99,211	11·44	381	45 00
1925-26 .	54·26	34,98,750	10.58,216	5,82,018	6·63	1,87,332	3,96,686	11·28	375	45·00
1926-27 .	54·30	35,15,412	9,83,602	5,40,981	15·39	1,67,970	3,73,011	10·61	348	45·00
1927-28 .	54·30	35,29,179	9,76,645	5,37,155	15·22	1,65,817	3,71,338	10·52	346	45·00
1928-29 .	54·30	36,08,254	9,07,287	4,99,008	13·83	1,55,635	3,43,373	9·51	321	45·00
1929-30 .	54·30	36,14,721	8,06,857	4,43,771	12·28	1,26,444	3,17,327	8·78	285	45·00
1930-31 .	54·79	36,21,580	7,79,402	4,28,671	11·84	1,18,643	3,10,028	8·56	267	45·00
1931-32 .	54·79	36,23,001	5,99,974	3,29,986	9·11	69,070	2,60,016	7·20	209	45·00
1932-33 .	54·79	36,31,020	6,18,081	3,39,945	9·36	74,013	2,65,932	7·32	216	45·00
1933-34 .	54·81	36,35,602	6,14,811	3,38,146	9·30	73,286	2,64,860	7·29	215	45·00
1934-35 .	54·81	36,45,949	6,00,103	3,30,057	9·05	69,071	2,60,986	7·16	210	45·00

(*c*) Hoshiarpur Doab Branch (Jullundur-Mukerian and Phagwara-Rahon) railways (5′ 6″ gauge)—

Managing Agents.—Gillanders Arbuthnot & Co., Calcutta.

Date of registration of the Company.—27th February 1914.

The construction of the Jullundur-Mukerian and Phagwara-Rahon railways by the Hoshiarpur Doab Branch Railways Company was authorised by the Railway Board in their letter No. $\frac{6}{57}\frac{7}{0}$-R.C., dated the 13th March 1914.

2. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(c) Hoshiarpur Doab Branch (Jullundur-Mukerian and Phagwara-Rahon) railways (5′ 6″ gauge)—*contd.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
JULLUNDUR-MUKERIAN RAILWAY—			
Jullundur City to Tanda Urmar	1-1-15	25·54	
Tanda Urmar to Dasuya	1-2-15	9·45	
Dasuya to Mukerian	1-3-15	10·09	
TOTAL JULLUNDUR-MUKERIAN RAILWAY	..	..	45·08
PHAGWARA-RAHON RAILWAY—			
Main line—			
Phagwara to Kariah	1-4-15	18·53	
Kariah to Rahon	27-5-15	7·95	
			26·48
Jaijon extension—			
Nawanshahr to Jaijon	3-5-17	19·55	19·55
TOTAL PHAGWARA-RAHON RAILWAY	..	..	46·03

Details of construction—

Permanent way.—The permanent-way on the two railways consists of 58½-lb. and 60-lb. flat-footed steel rails on deodar, fir and treated chir sleepers with bearing plates; and on the Jaijon extension of 75-lb. F. F. 1887 type rail also 68-lb. double and bull headed, 64-lb. double-headed and 75-lb. British Standard section and 62-lb. flat-footed rails laid on deodar, treated fir and treated chir sleepers with bearing plates.

Ballast.—Both the railways are ballasted with stone. The facing points, crossings, passenger platforms, level crossings, bridge approaches and sharper curves on the Phagwara-Rahon railway are ballasted with brick.

Fencing.—Fencing has been provided only at first class level crossings for a short distance on each side of the gates.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient on the Jullundur-Mukerian railway is 1 in 250 and on the Phagwara-Rahon railway, 1 in 400 on the main line and 1 in 100 on the Jaijon extension.

Contracts—

Dated the 21st February 1917, *between the Secretary of State and the Hoshiarpur Doab Branch Railways Company*, as to the construction, maintenance, management and working of the Hoshiarpur Doab Branch railways (Jullundur-Mukerian and Phagwara-Rahon railways).

Railway Board's letter No. 20-P., dated the 22nd January 1916, authorising to increase the nominal capital of the Company from Rs. 50 lakhs to Rs. 65 lakhs and sanctioning the immediate issue of a sum of Rs. 10 lakhs (increased subsequently to Rs. 12 lakhs in Railway Board's telegram No. 20-P.-16, dated the 27th January 1916) for the construction of the Jaijon extension and the grant to the Company of an additional allowance of Rs. 2,000 per annum for administration charges in respect of the extension.

Dated the 30th May 1922 (supplemental to the contract of 1917) *between the Secretary of State and the Hoshiarpur Doab Branch Railways Company*, as to the construction, maintenance and working of the Nawashahr to Jaijon extension.

Railway Board in their letter No. 1912-F., dated the 12th March 1931 sanctioned a cash credit of Rs. 4 lakhs to meet further Capital expenditure.

Main provisions of contract—

(i) *Land.*—Land in British territory provided by Government free of cost to the Company.

(ii) *Government aid.*—By way of rebate Government allow to the Company, in respect of each year such a sum, not exceeding the net earnings of the North Western railway derived from all traffic except stores for maintenance or working, interchanged between the North Western railway and the said railways, as shall, together with the net earnings of the Company, be equal to the interest for the year at a rate of 5 per cent. per annum on the share capital of the Company for the time being paid up. They also allow, subject to the conditions mentioned in clause 6, Schedule II of the agreement, Rs. 12,000 and such other actual expenses for or towards the office expenses and expenses of management, and direction of the Company as are specified in that clause, as also all such legal expenses as may be properly incurred by the Company and approved by the Secretary of State or the Government of India and as are under the provisions of the agreement debitable to Revenue.

(iii) *Terms of working.*—For management, maintenance, working and use of rolling-stock, Government retain 50 per cent. of the gross earnings of these railways in each year, the remainder constituting the net earnings is paid to the Company.

NOTE.—The interest on the unexpended capital also forms part of the net earnings of the Company.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(c) Hoshiarpur Doab Branch (Jullundur-Mukerian and Phagwara-Rahon) railways (5′ 6″ gauge)—*concld.*

Main provisions of contract—*concld.*

(iv) *Distribution of profits.*—Should the net earnings of the Company in any year exceed the minimum amount sufficient to pay a dividend of 5 per cent. per annum, such excess is to be applied towards the payment of the office expenses and expenses of management and direction of the Company stated under (ii), the balance, if any, being divided equally between the Government and the Company, provided that if the surplus profits are insufficient to meet the administration charges, the balance will be paid to the Company by the working agency out of the stipulated amount retained by the latter as working expenses.

(v) *Rates and fares.*—To be sanctioned by the Secretary of State within the maximum and minimum in force on, and the classification of goods to be in conformity with that of, the North Western railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—

(*b*) Government bullion and coin, and the persons in charge thereof.—

} To be conveyed in all respects as far as practicable in the same manner and subject to the same regulations and control by the Secretary of State as the same are conveyed on the North Western railway.

(vii) *Power of the Government to determine contract.*—Government may, on giving 12 months' previous notice of purchase in writing, determine the contract on the 31st March 1946 or on the 31st March in the last year of any subsequent period of 10 years by paying to the Company in rupees, 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the years, immediately preceding the date of determination, subject to a limit of 20 per cent. in excess of, but not less than, the total capital expenditure of the Company.

The Government may also, by giving 12 months' previous notice of "special purchase", determine the contract at any time in the following cases, by paying in rupee currency to the Company 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years preceding the date of determination or 115 per cent. of the total capital expenditure of the company whichever may be the greater—

(*a*) when it is considered desirable to alter the gauge of the railways,
(*b*) when it is considered desirable to convert the railways into a line of through communication,
(*c*) when it is considered desirable to extend the said railways and the Company fails to raise additional capital for such extension within 6 months from date of receipt of the formal requisition from Government.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of the contract.*—From 21st February 1917 to 31st March 1946 and thereafter as noted under (vii).

Statistics of working—

Year.	Mileage open at end of each year.		Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.		Gross earnings.		Net earnings.		Percentage of net earnings on total capital outlay given in columns 4 and 5.		Rebate and Administration charges from North Western railway (+), or share of surplus profits payable to Government (—).	Total income.	Percentage of total income on total capital outlay given in columns 4 and 5.	Earnings per mile per week.		Proportion of expenses to earnings.
	J. M. Ry.	P. R. Ry.	J. M. Ry.	P. R. Ry.	J. M. Ry.	P. R. Ry.	J. M. Ry.	P. R. Ry.	J. M. Ry.	P. R. Ry.				J. M. Ry.	P. R. Ry.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Miles.	Miles.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.		Rs.	Rs.	
1914-15	45·40	..	19,88,437	..	2,795	..	1,397	..	0·07	..	..	1,397	0·07	5	..	50·00
1915-16	44·80	25·84	31,78,124	12,97,446	1,45,120	1,26,562	72,559	63,281	2·28	4·87	..	1,35,840	3·03	62	94	50·00
1916-17	44·81	25·79	31,47,561	23,23,847	2,11,597	1,88,481	1,05,799	94,241	3·36	4·06	+24,960	2,25,000	4·11	91	140	50·00
1917-18	44·81	45·21	28,89,137	25,75,826	2,04,671	1,93,372	1,02,335	96,686	3·54	3·75	+92,480	2,91,451	5·33	88	85	50·00
1918-19	44·81	45·21	30,52,033	25,75,442	1,78,960	2,51,522	89,475	1,25,761	2·93	4·88	+78,795	2,94,031	5·22	77	107	50·00
1919-20	44·81	45·21	30,66,732	25,95,837	2,13,248	2,56,329	1,06,624	1,28,165	3·47	4·93	+64,638	2,99,427	5·28	92	109	50·00
1920-21	44·81	45·21	31,09,852	26,05,676	3,04,620	3,40,716	1,52,310	1,70,358	4·89	6·53	—17,529	3,05,139	5·34	131	145	50 00
1921-22	44·81	45·21	32,02,536	26,12,144	2,99,267	3,68,107	1,49,633	1,84,053	4·67	7·04	—15,610	3,18,076	5·47	128	157	50·00
1922-23	44·81	45·21	32,48,644	26,20,110	3,42,317	4,28,741	1,71,159	2,14,370	5·27	8·13	—26,364	3,59,165	6·12	147	182	50·00
1923-24	44·81	45·22	32,87,653	26,47,684	3,47,125	4,55,732	1,73,563	2,27,866	5·28	8·61	—38,791	3,62,638	6·11	149	194	50.00
1924-25	44·81	45·22	33,39,725	26,55,934	3,61,867	4,70,290	1,80,933	2,35,115	5·41	8·85	—44,572	3,71,476	6·19	155	200	50·00
1925-26	44·90	45·40	34,50,879	26,78,234	3,65,515	4,61,119	1,82,757	2,30,559	5·30	8·61	—39,971	3,73,345	6·09	156	195	50·00
1926-27	44·90	45·40	34,60,386	27,50,141	3,55,093	4,60,823	1,77,546	2,30,411	5·12	8·38	—37,294	3,70,663	5·96	152	194	50·00
1927-28	44·80	45·40	35,08,940	27,86,908	2,82,062	3,87,769	1,41,040	1,93,884	4·02	6·96	+9,743	3,44,667	5·47	121	164	50·00
1928-29	44·70	45·59	35,52,382	28,06,008	2,77,072	3,72,892	1,38,536	1,86,476	3·89	6·64	+5,148	3,30,120	5·19	110	158	50·00
1929-30	44·66	45·59	36,14,948	28,24,964	2,76,377	3,80,328	1,38,188	1,90,164	3·82	6·37	+16,694	3,35,046	5·20	110	152	50.00
1930-31	45·04	45·59	36,13,327	28,45,622	2,41,969	3,00,372	1,20,984	1,50,185	3·35	5·28	+ 65,962	3,37,131	5·22	103	123	50·00
1931-32	44·66	45·59	36,25,719	28,54,934	2,01,598	2,56,437	1,00,799	1,28,218	2·78	4·49	+1,07,618	3,36,635	5·19	86	108	50·00
1932-33	44·92	45·62	36,25,889	28,55,128	1,93,616	2,96,802	96,808	1,48,401	2·67	5·20	+ 93,486	3,38,695	5·23	83	125	50·00
1933-34	45·08	46·03	36,25,519	28,66,677	2,14,894	2,96,039	1,07,447	1,48,019	2·96	5·16	+86,251	3,41,717	5·26	91	123	50·00
1934-35	45·08	46·03	36,30,070	28,67,683	2,16,453	2,83,767	1,08,226	1,41,883	2·98	4·95	+91,038	3,41,147	5·25	92	118	50·00
1935-36	45·08	46·03	36,42,609	28,73,514	2,13,271	2,88,509	1,06,635	1,44,254	2·93	5·02	+91,289	3,42,178	5·25	90	120	50·00
1936-37	45·08	46·03	36,50,942	28,89,647	2,37,629	2,72,088	1,18,814	1,36,041	3·25	4·71	+87,514	3,42,369	5·23	101	113	50·00
1937-38	45·08	46·03	36,68,054	28,92,703	2,61,280	3,00,939	1,30,640	1,50,469	3·56	5·20	+62,669	3,43,778	5·24	111	125	50·00
1938-39	45·08	46·03	36,79,866	28,94,141	2,71,623	2,88 203	1,35,811	1,44,101	3·69	4·98	+62,256	3,42,168	5·20	116	120	50·00

(d) Jammu and Kashmir railway (Indian State section) (5′ 6″ gauge)—

Progress in opening—

Section of railway. 1	Date of opening. 2	Miles. 3	Total. 4
Frontier of the Kashmir State to the left bank of the Tawi river near Jammu	15-3-90	15·86	15·86

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*d*) Jammu and Kashmir railway (Indian State section) (5′ 6″ gauge)—*concld.*

Details of construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel rails laid on deodar and T. S. wood sleepers with bearing plates.

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is unfenced except at Sialkot station.

Curves.—The sharpest curve is of 2,865 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Agreements—

Dated the 19th April 1913, having effect from 1st June 1912, *between the Government of India and the Kashmir Durbar*, as to construction and working.

Corrigendum, dated 14th September 1915, *between the Government of India and the Kashmir Durbar*, modifying the agreement of 19th April 1913.

Main provisions of agreement—

(i) *Land.*—Provided free of cost by the Durbar and the Government in their respective territories.

(ii) *Government aid.*—The section was constructed (from funds supplied by the Kashmir Durbar, whose property it is), and is managed, maintained, stocked and worked by the North Western railway.

By way of rebate the Government allow to the Durbar a payment on traffic interchanged with the North Western railway to such extent, as, together with the share of net earnings attributable to the section, will afford a total dividend of 3½ per cent. per annum on the actual capital expenditure to end of each year, subject to the proviso that such rebate in no case exceeds the North Western railway's net earnings from traffic interchanged with the section.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } For management, maintenance, use of rolling-stock and working, the North Western railway retains 55·50 per cent. of the gross earnings of the section, the remaining 44·50 per cent. together with rebate being credited to the Durbar.

(v) *Rates and fares.*—To be such as are from time to time in force on the main line of the North Western railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof. — } To be conveyed on the same general conditions as those in force on the main line of the North Western railway.

(*c*) Services to the Durbar.—As in clauses 15, 16 and 17 of the agreement.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Durbar to surrender agreement.*—
(ix) *Term of agreement.*— } The agreement is terminable on six months' notice by either party to the other.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14	16·01	10,28,648	1,15,662	51,470	5·00	..	51,470	5·00	140	55·50
1914-15	16·01	10,50,361	1,04,032	46,294	4·41	..	46,294	4·41	125	55·50
1915-16	16·01	10,52,682	1,36,203	60,611	5·76	..	60,611	5·76	163	55·50
1916-17	16·01	10,54,077	1,21,600	54,112	5·13	..	54,112	5·13	146	55·50
1917-18	16·01	10,60,116	1,11,523	49,628	4·68	..	49,628	4·68	134	55·50
1918-19	16·01	10,60,095	1,26,965	56,500	5·33	..	56,500	5·33	153	55·50
1919-20	16·01	10,60,095	1,12,340	49,991	4·71	..	49,991	4·71	135	55·50
1920-21	16·01	10,61,759	1,59,428	70,946	6·67	..	70,946	6·67	191	55·50
1921-22	16·01	10,66,189	1,62,776	72,435	6·80	..	72,435	6·80	196	55·50
1922-23	16·01	10,86,493	1,84,831	82,250	7·56	..	82,250	7·56	222	55·50
1923-24	16·01	10,99,877	1,80,382	80,268	7·30	..	80,268	7·30	217	55·50
1924-25	16·01	11,00,107	2,22,920	99,199	9·01	..	99,199	9·01	268	55·50
1925-26	16·01	11,00,093	2,23,462	99,441	9·04	..	99,441	9·04	268	55·50
1926-27	16·01	11,04,382	2,10,649	93,739	8·48	..	93,739	8·48	253	55·50
1927-28	16·01	11,07,735	2,00,981	89,437	8·07	..	89,437	8·07	241	55·50
1928-29	16·01	11,09,679	1,96,647	87,508	7·88	..	87,508	7·88	236	55·50
1929-30	16·01	11,13,086	1,52,314	67,779	6·08	..	67,779	6·08	183	55·50
1930-31	16·01	11,25,279	1,64,257	73,096	6·49	..	73,096	6·49	197	55·50
1931-32	16·01	11,27,001	1,43,343	63,788	5·66	..	63,788	5·66	171	55·50
1932-33	15·86	11,29,944	1,59,944	71,175	6·30	..	71,175	6·30	193	55·50
1933-34	15·86	11,39,834	1,59,521	70,987	6·23	..	70,987	6·23	193	55·50
1934-35	15·86	11,44,213	1,21,753	54,180	4·74	..	54,180	4·74	147	55·50
1935-36	15·86	11,55,633	1,33,199	59,274	5·13	..	59,274	5·13	160	55·50
1936-37	15·86	11,68,468	1,25,428	55,815	4·78	..	55,815	4·78	152	55.50
1937-38	15·86	11,72,409	1,18,737	52,838	4·50	..	52,838	4·50	144	55·50
1938-39	15·86	11,77,150	1,28,559	57,209	4·86	..	57,209	4·86	156	55·50

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*e*) Jind-Panipat Railway (Indian State Section) (5′ 6″ gauge)—

This line is the portion of the Jind-Panipat railway which lies within the limits of Jind territory; the portion lying in British territory which formed an integral part of the Delhi-Umballa-Kalka Railway has become a part of the North Western Railway (5′ 6″ gauge) with the purchase of the Delhi-Umballa-Kalka Railway from 1st April 1926. Its construction by the Agency of the Delhi-Umballa-Kalka Railway Company from funds supplied by the Jind Durbar was authorised by the Railway Board in their letter No. 2477-R.C., dated the 11th September 1913.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
From mile 2·84 to 28·78 between Jind City and Madlauda.	1-11-15	25·94	25·94

Details of construction—

Permanent-way.—The permanent-way consists of second-hand 75-lb. double-headed and 74-lb. F. F. steel rails on deodar, T. S. wood and Denham-Olpherts' sleepers.

Ballast.—The line is ballasted with broken bricks and stones

Fencing.—The line is fenced only round station-yards and at important road-crossings and villages.

Curves.—The sharpest curve has a radius of 2,865 feet

Gradients.—The ruling gradient is 1 in 250.

Contract—

Dated the 2nd September 1924, *between the Secretary of State and the Jind Darbar*, as to construction, maintenance and working of the Jind-Panipat Railway (Indian State Section).

Main provision of contract—

(i) *Land.*—Provided free of cost by the Durbar.

(ii) *Government aid.*
(iii) *Terms of working.*
(iv) *Distribution of profits.*
} The Secretary of State is to maintain and work the line, through the agency of a railway company or the State for 48 per cent. of gross earnings. The net earnings of the line are divided between the two sections of the Jind Panipat Railway in the same proportion as the capital expenditure on the whole line bears to the capital expenditure on each section.

(v) *Rates and fares.*—Are such as may be agreed upon between the Secretary of State and the working agency within the maximum and minimum in force on the main line of the working agency.

(vi) *Special obligations as to the conveyance of* —

(*a*) Mails, troops, police, high Government Officials and Government Stores.—
(*b*) Government bullion and coin and persons in charge thereof.—
} None specified.

(vii) *Power of the Government to determine contract.*—
(viii) *Power of the Durbar to determine contract.*—
} Either party may determine contract by giving to the other party 12 months' previous notice in writing.

Statistics of working. (Those for the periods prior to 1926-27 will be found in the History of Indian Rys. corrected up to 31st March 1926.)

Year	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs	Rs.	Rs.		Rs.	Rs.		Rs.	
1926-27	25·94	17,30,529	1,70,860	88,847	5·13	Nil	88,847	5·13	126	48·00
1927-28	25·94	17,45,784	1,62,246	84,368	4·83	Nil	84,368	4·83	120	48·00
1928-29	25·94	17,45,789	1,56,082	81,163	4·65	Nil	81,163	4·65	116	48·00
1929-30	25·94	17,67,484	1,48,010	76,964	4·35	Nil	76,964	4·35	110	48·00
1930-31	25·94	17,69,986	1,34,822	70,107	3·96	..	70,107	3·96	63	48·00
1931-32	25·94	17,69,986	95,663	49,745	2·81	..	49,745	2·81	71	48·00
1932-33	25·94	17,67,064	92,981	48,350	2·74	..	48,350	2·74	69	48·00
1933-34	25·94	17,67,064	1,04,150	54.158	3·06	..	54,158	3·06	77	48·00
1934-35	25·94	17,56,462	1,15,440	60,029	3·42	..	60,029	3·42	85	48·00
1935-36	25·94	17,56,439	1,08,670	56,508	3·21	..	56,508	3·21	80	48·00
1936-37	25·94	17,56,439	1,15,803	60,218	3·42	..	60,218	3·42	86	48·00
1937-38	25·94	17,56,439	1,27,630	66,368	3·78	..	66,368	3·78	94	48·00
1938-39	25·94	17,54,044	1,16,323	60,488	3·45	..	60,488	3·45	86	48·00

(*f*) Khanpur-Chachran Railway (5′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Khanpur to Chachran	2-7-11	21·98	21·98

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*f*) Khanpur-Chachran Railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent way.—The permanent-way consists of 60-lb. B. S. S. flat-footed rails laid on treated soft wood and steel trough sleepers.

Ballast.—The line is ballasted with brick and stone.

Fencing.—The line is not fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 500.

Agreement—

Dated the 21st August 1912 (having effect from the 1st January 1911), *between the Secretary of State and the Bahawalpur Durbar*, as to the construction, maintenance and working of the Khanpur-Chachran railway by the North Western railway.

Corrigendum (having effect from 1st April 1913) to the agreement of 21st August 1912, as to the adop tion of the Government financial year for the preparation of accounts.

Main provisions of agreement—

(i) *Land.*—To be provided free of cost by the Bahawalpur Durbar, both during and after construction-

(ii) *Government aid.*—The line was constructed by the Government (from funds supplied by the Bahawalpur Durbar, whose property it is), and is managed, maintained, stocked and worked, through the agency of the North Western railway as if it were part of its system.

By way of rebate Government allow to the Durbar a sum not exceeding in any year the net earnings of the North Western railway from traffic interchanged with the Khanpur-Chachran branch railway, excluding the net earnings from carriage of railway stores, as shall, together with the net earnings of the branch, make up an amount equal to interest at 3 per cent. per annum on the actual expenditure charged in the capital account of the branch.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } For management maintenance, and working, the North Western railway shall deduct and retain from the gross receipts, the costs, charges and expences, etc. So incurred subject to the condition that the amount so deducted and retained is limited to the sum obtained by applying to the gross receipts of the Khanpur Chachran Railway, the operating ratio of the entire commercial sections of the North Western Railway, *plus* 5 per cent. of the gross receipts for the use and upkeep of rolling stock, the balance being paid to the Durbar.

(v) *Rates and fares.*—To be the same as may, from time to time, be in force on the North Western railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high officials and stores of both the Government and the Durbar.—
(*b*) Government and Durbar bullion and coin, and the persons in charge thereof.— } To be carried on the same general conditions and at the same rates as may for the time being be in force on the North Western Railway.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Durbar to surrender agreement.*— } The agreement is terminable on the 1st January or 1st July in any year after 1935, on six months' previous notice given by either party to the other. The Government may also determine the agreement at any time, on six months' notice, should either the North Western Railway or the Bahawalpur Durbar fail to observe their respective obligations.

Upon the determination of the agreement the North-Western Railway shall give to the Bahawalpur Durbar possession of the Khanpur-Chachran Railway, together with all its belongings and moneys then payable to it, after which the Bahawalpur Durbar shall indemnify the North Western Railway against all debts and liabilities as may have been incurred and then be subsisting on behalf of the Khanpur-Chachran Railway.

(ix) *Terms of contract.*—From the 1st January 1911 until 1935, and thereafter as noted under (viii).

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*f*) Khanpur-Chachran Railway (5′ 6″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 1 to the Railway Administration Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western Railway.	Total income.	Percentage of total income on total capital outlay in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14 .	22·02	14,00,387	36,375	18,437	1·31	17,937	36,374	2·60	32	50·00
1914-15 .	22·02	14,00,328	36,516	18,257	1·30	24,179	42,436	3·03	32	50·00
1915-16 .	22·02	13,99,337	32,815	16,407	1·17	37,794	54,201	3·87	29	50·00
1916-17 .	22·02	14,00,003	39,729	19,865	1·42	22,134	41,999	3·00	35	50·00
1917-18 .	22·02	14,00,003	33,260	16,630	1·19	25,370	42,000	3·00	29	50·00
1918-19 .	22·02	14,00,003	27,914	13,967	0·99	26,357	40,314	2·88	24	50·00
1919-20 .	22·02	14,44,061	34,208	17,104	1·21	24,396	41,500	2·95	30	50·00
1920-21 .	22·02	14,03,812	43,183	20,591	1·53	16,670	38,261	2·72	38	50·00
1921-22 .	22·02	14,03,812	40,422	20,211	1·44	21,903	42,114	3·00	35	50·00
1922-23 .	21·98	14,12,482	48,304	24,152	1·71	9,301	33,453	2·37	42	50·00
1923-24 .	21·98	14,13,645	39,182	19,591	1·39	22,801	42,392	3·00	34	50·00
1924-25 .	21·98	14,16,338	40,023	20,011	1·41	22,439	42,450	3·00	35	50·00
1925-26 .	21·98	14,16,338	40,148	20,073	1·42	22,416	42,489	3·00	35	50·00
1926-27 .	21·98	14,19,421	42,902	21,451	1·51	21,085	42,536	3·00	38	50·00
1927-28 .	21·98	14,24,546	54,268	27,134	1·90	15,526	42,660	3·00	47	50·00
1928-29 .	21·98	14,29,887	45,222	12,915	0·90	29,902	42,817	3·00	40	71·44
1929-30 .	21·98	14,29,895	40,348	7,852	0·55	35,045	42,897	3·00	35	75·73
1930-31 .	21·98	14,33,761	46,273	9,136	0·64	33,811	42,947	3·00	40	78·15
1931-32 .	21·98	14,33,677	26,329	3,640	0·25	39,381	43,021	3·00	23	81·06
1932-33 .	21·98	14,33,677	22,017	4,416	0·31	23,697	28,113	1·96	19	80·55
1933-34 .	21.98	14,36,057	22,833	4,056	0·28	35,436	39,492	2·75	20	81·41
1934-35 .	21.98	14,36,057	26,616	6,115	0·43	36,940	43,055	3·00	23	79·05
1935-36 .	21·98	14,36,057	38,548	9,614	0·67	33,468	43,082	3·00	34	76·69
1936-37 .	21·98	14,36,057	45,439	15,479	1·08	27,603	43,082	3·00	40	70·87
1937-38 .	21·98	14,36,057	51,017	19,626	1·37	23,456	43,082	3·00	45	65·93
1938-39 .	21·98	14,36,057	45,182	12,431	0·87	30,651	43,082	3·00	39	70·78

(*g*) Ludhiana-Dhuri-Jakhal Railway (5′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Ludhiana to Jakhal *vid* Dhuri	10-4-01	78·58	78·58

Details of construction—

Permanent-way.—The permanent-way consists of 74-lb. flat-footed steel rails laid on deodar, Sal, treated chir and Indian Fir sleepers with bearing plates.

Ballast.—The line is ballasted throughout with brick, stone and kunkur.

Fencing.—Only station yards and about 100 feet on each side of level crossings are fenced.

Curves.—The sharpest curve is of 1,364 feet radius.

Gradients.—The ruling gradient is 1 in 400.

Agreement—

Dated the 6th September 1899, *between the Secretary of State and the Jind and Maler Kotla Durbars*, as to the construction, maintenance and working.

Railway Board's letter No. 756-R.A., dated the 28th November 1912, sanctioning the adoption of Government financial year for the preparation of accounts.

Main provisions of agreement—

(i) *Land.*—Provided free of cost by the Government in the case of British territory and by the Durbar concerned in the case of Indian State's territory up to the date of the agreement of 1899; thereafter all land provided by the Jind and Maler Kotla Durbars is debited to capital.

(ii) *Government aid.*—The Government constructed the line (from funds supplied in the ratio of $\frac{4}{5}$ths and $\frac{1}{5}$th, respectively, by the Jind and Maler Kotla Durbars, whose property it is), and manage, maintain, stock and work it, through the agency of the North Western Railway, as part of its system.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— For management, maintenance, use of rolling-stock and working the North Western Railway retains 52 per cent. of the gross earnings (prior to the 1st January 1913 the charge was made at 55 per cent. of the gross earnings, *vide* Railway Board's letter No. 192-R. T., dated the 29th January 1913), and the balance is paid to the Jind and Maler Kotla Durbars to be divided between them in the ratio of $\frac{4}{5}$ths to the former and $\frac{1}{5}$th to the letter.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*g*) Ludhiana-Dhuri-Jakhal Railway (5′ 6″ gauge)—*concld.*

Main provisions of agreement—*concld.*

(v) *Rates and fares.*—To be the same as may, from time to time, be in force on the North Western railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high officials and stores, both of the Government and the Durbars.—

(*b*) Bullion and coin of Government and the Durbars, and the persons in charge thereof.—

} To be carried on the same general conditions and at the same rates as may for the time being be in force on the North Western Railway.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Durbars to surrender agreement.*—
(ix) *Term of contract.*—

} Either party may determine the agreement on the 1st January or 1st July in any year, by giving six months' previous notice to the other. The Government may also determine the contract at any time on six months' notice in writing should either the North Western Railway or the Durbars fail to observe their respective obligations. Upon the determination of the agreement the North Western Railway will give to the Jind and Maler Kotla Durbars possession of the railway, all its belongings and moneys then payable to them, after which the Durbars will indemnify the North Western Railway against all debts and liabilities as may have been incurred, an then be subsisting on behalf of the Ludhiana-Dhuri-Jakhal Railway.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	78·65	42,19,576	8,92,734	4,34,531	10·30	218	51·33
1914-15	78·65	42,37,467	7,49,354	3,59,690	8·49	183	52·00
1915-16	78·65	42,53,978	9,08,985	4,36,313	10·26	221	52·00
1916-17	78·65	42,88,185	8,58,406	4,12,035	9·61	209	52·00
1917-18	78·65	43,17,455	7,62,036	3,65,778	8·47	186	52·00
1918-19	78·65	43,60,986	8,25,974	3,96,467	9·09	202	52·00
1919-20	78·65	43,76,042	9,73,022	4,67,050	10·67	238	52·00
1920-21	78·65	43,66,841	11,02,153	5,29,034	12·11	267	52·00
1921-22	78·65	44,14,069	10,91,513	5,23,292	11·85	269	52·00
1922-23	78·65	44,51,817	12,75,668	6,12,321	13·75	312	52·00
1923-24	78·65	45,17,438	12,49,455	5,99,738	13·28	306	52·00
1924-25	78·65	46,39,973	13,99,668	6,71,841	14·48	342	52·00
1925-26	78·65	46,71,275	13,91,277	6,67,813	14·29	340	52·00
1926-27	78·65	47,61,430	14,49,497	6,95,759	14·61	354	52·00
1927-28	78·65	47,66,380	14,80,171	7,10,482	14·90	362	52·00
1928-29	79·08	48,03,475	13,65,672	6,55,523	13·65	332	52·00
1929-30	79·08	48,27,336	14,91,198	7,15,775	14·83	362	52·00
1930-31	79·08	48,87,249	14,78,422	7,09,643	14·52	354	52·00
1931-32	79·59	49,02,786	11,21,848	5,38,487	10·98	270	52·00
1932-33	78·50	49,10,782	9,56,85[illegible]	4,59,290	9·35	234	52·00
1933-34	78·58	49,49,138	9,34,037	4,48,338	9·06	228	52·00
1934-35	78·58	49,51,599	9,93,044	4,76,661	9·63	242	52·00
1935-36	78·58	49,59,000	9,85,342	4,72,964	9·54	242	52·00
1936-37	78·58	49,70,738	11,11,522	5,33,531	10·73	271	52·00
1937-38	78·58	49,77,590	10,23,418	4,91,241	9·87	250	52·00
1938-39	78·58	49,76,310	11,94,493	5,73,357	11·52	292	52·00

(*h*) Mandra-Bhaun Railway (5′ 6″ gauge)—

Agents.—Messrs. Killick, Nixon & Co., Bombay.

Date of registration of the Company.—13th November 1913.

The construction of this line by the North Western Railway for the Mandra-Bhaun Railway Company, was sanctioned under Railway Board's Notification No. 355, dated the 3rd December 1913.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Mandra to Dhudial	1-5-15	27·25	
Dhudial to Chak Naurang	1-6-15	4·25	
Chak Naurang to Chakwal	1-9-15	7·86	
Chakwal to Bhaun	15-1-16	7·32	
			46·68

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(4) Mandra-Bhaun Railway (5′ 6″ gauge)—*contd*

Details of construction—

Permanent way.—The permanent way consists of second-hand 60-lb., 62-lb. and 75-lb. flat-footed steel rails laid on second-hand steel trough, deodar, Jarrah, Chir and Treated Fir sleepers.

Ballast.—The line is ballasted with stone

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 100 compensated

Contract—

Dated the 15th October 1914, *between the Secretary of State and the Mandra-Bhaun Railway Company*, as to the construction, maintenance, management and working of the Mandra-Bhaun Railway.

Main provisions of contract—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—The line was constructed by the Government (from funds supplied by the Mandra-Bhaun Railway Company whose property it is), and is managed, maintained, stocked and worked through the agency of the North Western Railway as if it were part of its system.

By way of rebate the Government allow to the Company, in respect of each year, such a sum not exceeding the net earnings of the North Western Railway derived from all traffic (except stores) interchanged between the North Western Railway and the said railway as shall, together with the net earnings of the Company, be equal to the interest for the year at a rate of 5 per cent. per annum on the share capital of the Company for the time being paid up. They also allow, subject to the conditions mentioned in clause 7, Schedule II, of the agreement, Rs. 7,200 and such other actual expenses, for or towards the office expenses, the expenses of management and direction of the Company, as are specified in that clause, as also all such legal expenses as may be properly incurred by the Company and approved by the Secretary of State or the Government of India and as are, under the provision of the agreement, debitable to revenue.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } For management, maintenance, working and use of rolling-stock the Government retain 50 per cent. of the gross earnings in each year of the Mandra-Bhaun Railway; the remainder, constituting the net earnings, is paid to the Company.

NOTE.—The interest on the unexpended capital also forms part of the net earnings of the Company.

But should the net earnings of the Company in any year exceed the minimum amount sufficient to pay a dividend of 5 per cent. per annum, such excess is to be applied towards the payment of office expenses and expenses of management and direction of the Company for the year referred to under (*ii*), the balance, if any, being divided equally between the Government and the Company. Provided that if the surplus profits are insufficient to meet the administration charges, the balance will be paid to the Company by the working agency out of the stipulated amount retained by the latter as working expenses.

(v) *Rates and fares.*—To be sanctioned by the Secretary of State within the maximum and minimum in force on, and the classification of goods to be in conformity with that of, the North-Western Railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—

(*b*) Government bullion and coin, and the persons in charge thereof.—

} To be conveyed in all respects as far as practicable in the same manner and subject to the same regulations and control by the Secretary of State as the same are conveyed over the North Western Railway.

(vii) *Power of the Government to determine contract.*—The Government may, by giving 12 months' previous notice in writing of purchase, determine the contract either on the 31st day of March 1947 or on the 31st day of March of the last year of any subsequent period of 10 years, by paying to the Company in rupees 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years immediately preceding the date of determination, subject to a limit of 20 per cent. in excess of, but not less than the total capital expenditure of the Company.

The Government may also, by giving 12 months' previous notice of special purchase, determine the contract at any time in the following cases :—

(*a*) when it is considered desirable to alter the gauge of the railway;

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*h*) Mandra-Bhaun Railway (5′ 6″ gauge)—*concld.*

Main provisions of contract—*contd.*

(*b*) when it is considered desirable to convert the railway into a line of through communication, and

(*c*) when it is considered desirable to extend the railway and the Company fails to raise additional capital for such extension within 6 months from receipt of the formal requisition from the Government.

If the contract be determined ' by notice of special purchase ' the Government will pay to the Company in rupees 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years preceding the date of determination or 115 per cent. of the total capital expenditure, whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—From 15th October 1914 to 31st March 1947 and thereafter as noted under (vii).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate and Administration charges from North-Western Railway (+), or share of surplus profits payable to Government (—).	Total income (column 5 + or — column 7).	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1915-16 .	46·38	21,35,280	20,484	10,242	0·48	..	10,242	0·42	8	50·00
1916-17 .	46·38	23,84,347	1,74,214	87,107	3·65	+31,162	1,18,269	4·96	72	50·00
1917-18 .	46·38	28,96,775	1,71,894	85,947	3·58	+60,224	1,46,171	6·10	71	50·00
1918-19 .	46·38	21,55,234	1,50,196	75,097	3·48	+58,371	1,33,468	6·19	62	50·00
1919-20 .	46·38	23,93,266	1,47,981	73,990	3·09	+59,910	1,33,900	5·59	61	50·00
1920-21 .	46·38	23,93,266	2,18,055	1,09,028	4·55	+24,877	1,33,905	5·63	90	50·00
1921-22 .	46·38	23,93,266	2,40,710	1,20,355	5·03	+12,392	1,32,747	5·55	100	50·00
1922-23 .	46·38	23,93,651	2,57,542	1,28,771	5·38	+8,681	1,37,452	5·74	107	50·00
1923-24 .	46·38	24,03,198	2,68,522	1,34,261	5·59	+3,726	1,37,987	5·74	111	50·00
1924-25 .	46·38	24,05,801	2,64,063	1,32,031	5·48	+6,193	1,38,224	5·74	109	50·00
1925-26 .	46·38	24,05,656	2,51,207	1,27,103	5·28	+12,175	1,39,278	5·79	105	50·00
1926-27 .	46·38	24,08,505	2,57,622	1,28,810	5·35	+9,416	1,38,226	5·74	107	50·00
1927-28 .	46·38	24,10,017	2,49,698	1,24,849	5·18	+13,604	1,38,453	5·74	104	50·00
1928-29 .	46·38	24,71,246	2,25,592	1,12,796	4·56	+22,053	1,34,849	5·46	93	50·00
1929-30 .	46·38	24,75,834	2,21,357	1,10,678	4·47	+26,506	1,37,184	5·54	91	50·00
1930-31 .	46·38	25,00,274	1,90,726	95,363	3·81	+42,863	1,38,226	5·53	78	50·00
1931-32 .	46·68	26,30,690	1,68,984	84,492	3·21	+51,077	1,35,569	5·15	69	50·00
1932-33 .	46·68	26,35,656	1,92,224	96,112	3·65	+49,777	1,45,889	5·53	79	50·00
1933-34 .	46·68	26,91,308	1,91,911	95,955	3·57	+50,293	1,46,248	5·44	79	50·00
1934-35 .	46·68	26,89,889	1,80,218	90,109	3·35	+58,161	1,48,270	5·51	74	50·00
1935-36 .	46·68	26,97,449	1,91,846	95,922	3·56	+52,630	1,48,552	5·51	78	50·00
1936-37 .	46·68	27,59,304	2,08,295	1,04,147	3·77	+44,473	1,48,620	5·39	86	50·00
1937-38 .	46·68	27,77,335	1,87,077	93,538	3·37	+58,052	1,51,590	5·46	77	50·00
1938-39 .	46·68	27,79,882	1,69,878	84,939	3·06	+69,079	1,54,018	5·54	70	50·00

(*i*) Rajpura-Bhatinda Railway (5′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Rajpura to Patiala	1-11-84	16·00	
Patiala to Bhatinda	13-10-89	91·78	
			107·78

Details of construction—

Permanent way.—The line from Rajpura to Patiala is laid with 75-lb F.F., S.S. steel 75-lb. B. S. S. and 75-lb. 'R' rails on deodar and treated chir sleepers, and from Patiala to Bhatinda with 75-lb. flat-footed steel rails on deodar, treated chir and fir sleepers

Ballast.—The line is ballasted throughout with brick and stone.

Fencing.—The line is fenced between Rajpura and Patiala at station yards, and 100 feet on each side of level-crossing between Patiala and Bhatinda.

Curves.—The sharpest curve is of 1,155 feet radius.

Gradients.—The ruling gradient is 1 in 400 with 1 in 250 on two long approaches at miles 30 and 31.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(i) Rajpura-Bhatinda Railway (5′ 6″ gauge)—*contd.*

Agreement—

Dated the 30th January 1893, *between the Secretary of State and the Patiala Durbar*, as to management maintenance and working of the Rajpura-Bhatinda Railway.

Main provisions of agreement—

( ) *Land.*—Land for original construction was provided free of cost by Government in British territory and by the Patiala Durbar in their territory; the cost of that provided by the Durbar after 13th October 1889 (the date on which the agreement came into force) is debited to the capital account.

(ii) *Government aid.*—The line, which is the property of the Patiala Durbar, is managed, maintained, stocked and worked by the Government through the agency of the North Western Railway as part of its system from the 13th October 1889.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } For management, maintenance, use of rolling-stock and working the North Western Railway retains 52 per cent. of the gross earnings. Prior to the 1st January 1904 the charge was made at 55 per cent. of the gross earnings, *vide* Government of India, Public Works Department, No. $\frac{8}{8}\frac{11}{14}$-R.T., dated the 5th October 1903, to the address of the ($\frac{\text{Government of the Punjab}}{\text{Manager, North Western Railway}}$) and the balance is paid to the Patiala Durbar.

(v) *Rates and fares.*—To be the same as may, from time to time, be in force on the North Western Railway.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high officials and stores both of the Government and of the Durbar.—
(*b*) Government and Durbar bullion and coin and the persons in charge thereof.—
} To be carried on the same general conditions and at the same rates as may for the time being be in force on the North Western Railway.

(vii) *Power of the Government to determine agreement.*—
(viii) *Power of the Durbar to surrender agreement.*—
(ix) *Term of agreement.*—
} The agreement is terminable on the 1st January or the 1st July in any year on six months previous notice in writing being given by either party to the agreement to the other. The Government may also determine the contract at any time on six months' notice in writing, should either the North Western Railway, or the Patiala Durbar, fail to observe their respective obligations. Upon the determination of the agreement the North Western Railway will give to the Patiala Durbar possession of the railway, all its belongings and moneys then payable to it after which the Patiala Durbar will indemnify the North Western Railway against all debts and liabilities as may have been incurred and then be subsisting on behalf of the Rajpura-Bhatinda Railway.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	108·04	71,54,898	19,79,514	9,50,167	13·28	352	52·00
1914-15	108·04	72,49,445	13,42,862	6,44,574	8·89	239	52·00
1915-16	108·04	72,75,107	16,73,791	8,03,419	11·04	296	52·00
1916-17	108·04	73,11,085	18,09,610	8,68,613	11·88	321	52·00
1917-18	108·04	75,78,443	21,63,806	10,38,627	13·70	385	52·00
1918-19	108·04	74,37,192	27,70,169	13,29,682	17·88	493	52·00
1919-20	108·04	76,61,018	19,55,062	9,38,430	12·24	347	52·00
1920-21	108·04	76,66,191	17,98,888	8,63,466	12·56	320	52·00
1921-22	108·04	76,74,188	16,55,086	7,94,442	10·35	295	52·00
1922-23	108·04	76,97,560	19,89,986	9,55,193	12·41	354	52·00
1923-24	108·04	77,05,273	26,29,022	12,61,931	16·38	468	52·00
1924-25	108·04	77,16,374	25,67,807	12,32,547	15·79	457	52·00
1925-26	108·56	77,38,483	22,53,460	10,81,661	13·98	399	52·00
1926-27	108·56	77,50,270	23,02,187	11,05,049	14·26	408	52·00
1927-28	108·56	78,03,925	24,37,200	11,69,856	14·99	432	52·00
1928-29	108·57	78,14,252	23,62,972	11,34,227	14·51	418	52·00
1929-30	108·57	78,81,848	20,28,604	9,73,730	12·35	358	52·00
1930-31	108·57	79,03,759	19,53,809	9,37,829	11·86	347	52·00
1931-32	107·78	79,38,050	18,16,187	8,71,770	10·98	322	52·00
1932-33	107·78	79,37,846	18,59,966	8,92,784	11·25	331	52·00
1933-34	107·78	79,46,591	16,65,642	7,99,508	10·06	296	52·00
1934-35	107·78	79,52,409	15,79,552	7,58,185	9·53	281	52·00
1935 36	107·78	79,63,581	19,09,503	9,16,561	11·51	339	52·00
1936-37	107·78	79,87,013	18,99,183	9,11,608	11·41	338	52·00
1937-38	107·78	80,57,745	20,29,784	9,74,296	12·09	361	52·00
1938-39	107·78	81,09,821	19,28,980	9,25,910	11·42	343	52·00

12. NORTH WESTERN RAILWAY SYSTEM—*contd*

(j) Sialkot-Narowal Railway (5′ 6″ gauge)—

Date of registration of the Company.—21st July 1914.

Agents.—Messrs. Killick, Nixon & Co., Bombay.

The construction of this line by the North Western Railway for the Sialkot-Narowal Railway Company was sanctioned under Railway Board's Notification No. 19, dated the 26th January 1915.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Sialkot to Kila Sobha Singh	10-11-15	27·17	
Kila Sobha Singh to Narowal	10-1-16	11·53	38·70

Details of construction—

Permanent-way.—The permanent-way consists of new 60-lb. B. S. S., 62 and 75-lb. flat-footed steel rails laid on deodar, T. S. Wood and chir sleepers with bearing plates.

Ballast.—The line is ballasted with shingle with a bottom layer of brick ballast.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 2,865 feet radius.

Gradients.—The ruling gradient is 1 in 250

Contract—

Dated the 15th February 1917, *between the Secretary of State for India and the Sialkot-Narowal Railway Company*, as to construction, maintenance, management and working of the Sialkot-Narowal Railway.

Railway Board's letter No. 74-P. 16, dated the 15th January 1917, sanctioning the raising of an additional capital of Rs. 2½ lakhs.

Main provisions of contract—

(i) *Land.*—Land in British territory provided by Government free of cost to the Company.

(ii) *Government aid.*—The line was constructed by the Government (from funds supplied by the Sialkot Narowal Railway Company whose property it is) and is managed, maintained, stocked and worked by Government through the agency of the North Western Railway as if it were a part of its system.

By way of rebate Government allow to the Company in respect of each year, such a sum not exceeding the net earnings of the North Western Railway derived from all traffic, except stores for maintenance or working, interchanged between the North Western Railway and the said railway, as shall, together with the net earnings of the Company, be equal to the interest for the year at a rate of 5 per cent. per annum on the share capital of the Company for the time being paid up. They also allow, subject to the conditions mentioned in clause 7, Schedule II, of the agreement, Rs. 7,200, and such other actual expenses for or towards the office expenses and expenses of management and direction of the Company as are specified in that clause; as also all such legal expenses as may be properly incurred by the Company and approved by the Secretary of State or the Government of India and as are, under the provisions of the contract, debitable to Revenue.

(iii) *Terms of working.*— } For management, maintenance, working and use of rolling stock
(iv) *Distribution of profits.*— } the Government retain the same percentage of the gross earnings for which the North Western Railway System including this railway is worked subject to a maximum of 50 per cent. of the gross earnings of the said railway, the remainder constituting the net earnings is paid to the Company.

NOTE.—The amount of interest on unexpended capital also forms part of its net earnings of the Company.

Should the net earnings of the Company in any year exceed the minimum amount, sufficient to pay a dividend of 5 per cent. per annum, such excess is to be applied towards the payment of the office expenses and expenses of management and direction of the Company stated under (*ii*), the balance, if any, being divided equally between the Government and the Company. Provided that if the surplus profits are insufficient to meet the Administration charges the balance will be paid to the Company by the working agency out of the stipulated amount retained by the latter as working expenses.

(v) *Rates and fares.*—To be sanctioned by the Secretary of State within the maximum and minimum in force on, and the classification of goods to be in conformity with that of, the North Western Railway.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*j*) Sialkot-Narowal Railway (5′ 6″ gauge)—*contd.*

Main provisions of contract—*contd.*

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—

(*b*) Government bullion and coin and the persons in charge thereof.—

} To be carried, in all respects as far as practicable, in the same manner and subject to the same regulations and control by the Secretary of State as the same are carried on the North Western Railway.

(vii) *Power of the Government to determine contract.*—Government may, by giving 12 months' previous notice of purchase, determine the contract on the 31st March 1946 or on the 31st March in the last year of any subsequent period of 10 years by paying to the Company in rupees 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years immediately preceding the date of determination, subject to a limit of 20 per cent. in excess of, but not less than, the total capital expenditure of the Company. Government may also by giving 12 months' previous notice of "special purchase" determine the contract at any time in the following cases :—

(*a*) when it is considered desirable to alter the gauge of the railway ,

(*b*) when it is considered desirable to convert the railway into a line of through communication ; and

(*c*) when it is considered desirable to extend the said railway and the Company fails to raise additional capital for such extension within 6 months from date of receipt of the formal requisition from Government.

If the contract shall be determined by notice of "Special purchase" the Government will pay to the Company in rupees 25 times the average of the yearly net earnings (excluding payment. on account of rebate) during the 3 years preceding the date of determination or 115 per cent. of the total capital expenditure of the Company whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of the contract.*—From 15th February 1917 to 31st March 1946 and thereafter as noted under (vii).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate and Administration charges from the North Western Railway (+) or share of surplus profits to (—), the Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1915-16	38·15	24,47,581	27,067	13,533	0·55	..	13,533	0·55	14	50·00
1916-17	38·15	27,23,628	2,13,696	1,06,848	3·92	+25,923	1,32,771	4·87	107	50·00
1917-18	38·16	27,57,388	2,25,819	1,29,590	4·70	+38,395	1,67,985	6·09	114	42·61
1918-19	38·16	25,04,908	2,24,822	1,16,181	4·64	+36,146	1,52,327	6·08	113	50·00
1919-20	38·16	27,54,080	2,46,348	1,23,174	4·47	+29,300	1,52,474	5·53	124	50·00
1920-21	38·16	27,54,436	3,29,255	1,64,628	5·93	—5,952	1,58,676	5·76	166	50·00
1921-22	38·16	27,54,071	3,33,218	1,66,609	6·05	—13,183	1,53,426	5·57	168	50·00
1922-23	38·16	27,54,071	3,70,571	1,85,286	6·73	—14,112	1,71,174	6·22	187	50·00
1923-24	38·16	27,59,031	3,62,792	1,81,396	6·57	—12,094	1,69,302	6·14	183	50·00
1924-25	38·16	27,90,252	4,31,983	2,15,992	7·74	—29,708	1,86,284	6·67	218	50·00
1925-26	38·16	28,22,614	4,16,666	2,08,333	7·38	—21,380	1,83,953	6·52	210	50·00
1926-27	38·16	28,82,028	4,30,965	2,15,482	7·48	—26,950	1,88,532	6·54	217	50·00
1927-28	38·59	28,96,368	3,75,135	1,87,567	6·48	—11,954	1,75,613	6·06	187	50·00
1928-29	38·59	29,10,953	3,60,896	1,80,448	6·19	—11,978	1,68,470	5·78	180	50·00
1929-30	38·60	29,64,043	4,89,541	2,44,770	8·26	—43,696	2,01,074	6·78	243	50·00
1930-31	38·60	29,51,821	4,27,945	2,13,972	7·25	—27,304	1,86,668	6·32	210	50·00
1931-32	38·60	29,73,357	3,47,673	1,73,836	5·84	—6,686	1,67,150	5·62	172	50·00
1932-33	38·60	30,52,584	4,02,830	2,01,415	6·60	—19,511	1,81,904	5·96	200	50·00
1933-34	38·60	30,93,439	4,76,506	2,38,253	7·70	—36,178	2,02,075	6·53	237	50·00
1934-35	38·70	31,18,390	4,52,797	2,26,398	7·26	—29,446	1,96,952	6·32	224	50·00
1935-36	38·70	31,48,626	4,31,495	2,15,747	6·85	—23,175	1,92,572	6·12	213	50·00
1936-37	38·70	31,67,145	4,52,488	2,26,243	7·14	—27,490	1,98,753	6·28	224	50·00
1937-38	38·70	31,72,773	4,30,700	2,15,350	6·79	—21,366	1,93,984	6·11	213	50·00
1938-39	38·70	31,77,707	4,19,933	2,09,966	6·61	—17,879	1,92,087	6·04	208	50·00

(*k*) Sirhind-Rupar Railway (5′ 6″ gauge)—

The construction of this line from funds to be provided by the Patiala Durbar was sanctioned in Railway Board's Notification No. 537-Tech., dated the 25th February 1926.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Sirhind to Rupar	26-2-28	30·96	30·96

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*k*) Sirhind-Rupar Railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way—The permanent-way consists of 75-lb. R. F. F. rails laid on deodar sleepers with bearing plates.

Ballast.—The line is fully ballasted. There is stone ballast from 0·0 to 0/14 and from 11/5 to mile 30 and brick ballast from 0/14 to 11/5.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 3°=1,910 feet radius.

Gradient.—The steepest gradient is 1 in 250.

Statistics of Working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1927-28 . .	30·53	23,04,683	22,403	11,201	..	..	50·00
1928-29 . .	30·96	23,04,683	2,40,572	1,20,286	5·22	149	50·00
1929-30 . .	30·96	23,04,683	2,67,881	1,33,940	5·81	166	50·00
1930-31 . .	30 96	31,54,507	2,26,218	1,13,109	3·59	145	50·00
1931-32 . .	30·96	31,55,520	1,87,344	93,672	2·97	116	50·00
1932-33 . .	30·96	31,55,520	1,54,428	77,214	2·45	96	50·00
1933-34 . .	30·96	31,55,520	1,58,298	79,149	2·51	98	50·00
1934-35 . .	30·96	31,58,287	1,61,550	80,775	2·56	100	50·00
1935-36 . .	30·96	31,60,972	1,53,866	76,932	2·43	95	50·00
1936-37 . .	30·96	31,60,972	1,50,421	75,210	2·38	93	50·00
1937-38 . .	30·96	31,60,972	1,73,527	86,763	2·74	108	50·00
1938-39 . .	30·96	31,60,972	1,68,990	84,495	2·67	105	50·00

(*l*) Bahawalnagar Fort Abbas-Kut-Al-Imara Railway (5′ 6″ gauge)—

The construction of this line from funds to be provided by the Bahawalpur Durbar was sanctioned in Railway Board's Notification No. 1268-Tech., dated the 21st October 1926.

Progress in opening—

Section of railways.	Date of opening.	Miles.	Total.
1	2	3	4
Bahawalnagar to Faqirwali	4-4-28	40·82	
Faqirwali to Fort Abbas	8-11-28	22·69	
Fort Abbas to Kut-al-Imara	4-2-31	88·00	
Total .	..		151·51

Details of Construction—

Permanent-way.—The permanent-way consists of 75-lb. flat-footed steel S. S. rails laid on new creosoted chir and fir sleepers with bearing plates except for a length of some 15 miles on Fort Abbas Kut-al-Imara section where 77½-lb. B. H. rails with new deodar sleepers have been used.

Ballast.—No stone or brick-ballast has been provided in the track; only earth boxing has been provided.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,432·5 ft. radius.

Gradients.—The ruling gradient is 1 in 300 un-compensated on a 2° curve.

Statistics of Working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1928-29 . .	63·08	42,00,448	1,29,884	37,095	0·88	39	71·44
1929-30 . .	62·73	41,66,852	1,77,464	37,499	0·90	54	75·73
1930-31 . .	151·53	42,39,139	1,97,027	38,755	0·91	49	78·15
1931-32 . .	151·76	92,26,701	1,90,307	30,311	0·33	24	81·06
1932-33 . .	151·02	93,53,420	2,28,287	45,373	0·49	29	80·55
1933-34 . .	151·69	93,43,563	2,99,387	53,693	0·57	38	81·41
1934-35 . .	151·51	93,43,579	3,10,564	72,129	0·77	39	79·05
1935-36 . .	151·51	93,55,994	3,66,426	92,473	0·99	46	76·69
1936-37 . .	151·51	93,58,994	3,62,033	1,26,786	1·35	46	70·87
1937-38 . .	151·51	93,55,897	3,98,599	1,53,688	1·64	51	65·93
1938-39 . .	151·51	93,60,003	(*a*)6,92,616	1,97,938	2·11	88	69·01

(*a*) Includes adjustment of Rs. 3,13,753 on account of diversion of traffic *via* this railway during the years 1933-34 to 1936-37.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*m*) Kalka-Simla Railway (2′ 6″ gauge)—

The railway was constructed by, and at the cost of, the Delhi-Umballa-Kalka Railway Company. On the representation of the Company it was decided to purchase the Company's interest in the line. This was effected by the payment of £300,000; the Secretary of State waiving all claims to arrears of unpaid interest on the advances, *viz.*, Rs. 1,16,47,512, made to the Company. The purchase of the line by the State was effected from 1st January 1906; but the Company continued to work it under the direct orders of the Railway Board up to the 31st December 1906. It was made over to the North Western Railway administration with effect from the 1st January 1907.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Kalka to Simla station	9-11-03	59·45	
Simla station to old Bullock Train Office	27-6-09	0·48	
TOTAL	..		59·93

Details of construction—

Permanent-way.—The permanent-way consists of 62, 60 R. type and 41¼-lb. flat-footed steel rails fitted with bearing plates on deodar cuts and sal sleepers.

The 41¼-lb rails are being renewed with 60-lb. and 62-lb. flat-footed rails. The sharpest curves are partially check railed with 75-lb. and 41¼-lb. rails.

Ballast.—The line is ballasted with stone.

Fencing.—The line is fenced only along the Kalka camping ground and through the outskirts of the town of Kalka and about a mile in Simla.

Curves.—The sharpest curve is of 110 feet radius.

Gradients.—The ruling gradient is 1 in 33 uncompensated.

Contract—

Nil. The line is owned and worked by the State.

Rates and fairs.—May be varied within the limits of certain maxima and minima subject to certain special conditions regarding charges for tunnels.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1906 and in Appendix 1 to the Report for 1913-14)—

NOTE:—The figures in this table are also included in the Statistics of working of the North Western Railway (5′ 6″ gauge)—*vide* note on the top of the table of Statistics of working of that Railway.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1913-14 .	59·92	1,99,24,926	13,34,402	4,48,750	2·25	6,28,187	—1,79,437	428	66·37
1914-15 .	59·92	1,97,43,601	12,82,261	7,41,912	3·76	6,42,417	+99,495	412	42·14
1915-16 .	59·92	1,97,94,816	13,47,605	7,27,659	3·67	6,39,799	+87,860	433	46·00
1916-17 .	59·92	1,97,56,575	15,53,676	7,42,212	3·76	6,07,566	+1,34,646	498	52·23
1917-18 .	59·92	1,97,88,117	16,12,934	8,23,957	4·16	6,40,000	+1,83,957	518	48·92
1918-19 .	59·92	1,98,12,836	19,74,316	8,62,669	4·35	6,42,531	+2,20,138	634	56·31
1919-20 .	59·92	1,98,22,845	21,71,871	8,42,568	4·25	6,76,859	+1,65,709	695	61·20
1920-21 .	59·92	2,00,00,645	23,20,122	7,21,643	3·61	6,64,907	+56,736	745	68·85
1921-22 .	59·92	2,02,36,702	22,40,303	6,03,374	2·98	6,79,043	—75,669	718	73·07
1922-23 .	59·92	2,04,47,225	23,37,090	6,79,144	3·32	6,89,025	—9,881	759	70·94
1923-24 .	59·92	2,05,56,182	22,87,278	7,75,223	3·77	6,99,343	+75,880	730	66·11
1924-25 .	59·92	2,06,20,723	22,27,648	8,90,358	4·31	7,03,281	+1,87,077	713	60·03
1925-26 .	59·92	2,07,85,622	22,59,666	6,60,845	3·17	7,10,523	—49,678	725	70·75
1926-27 .	59·92	2,12,60,843	19,34,932	2,43,086	1·14	7,25,725	—4,82,639	619	87·44
1927-28 .	59·92	2,15,69,681	17,11,970	43,594	0·20	7,46,183	—7,02,589	546	97·45
1928-29 .	59·92	2,17,30,262	17,52,303	—1,96,878	—0·90	7,63,594	—9,60,442	561	111·23
1929-30 .	59·92	2,17,53,707	16,94,671	—3,11,745	—1·43	7,62,371	—10,74,116	543	118·39
1930-31 .	59·92	2,19,11,295	16,93,184	1,82,035	0·83	7,75,273	—5,93,238	542	89·25
1931-32 .	59·92	2,20,97,371	15,15,971	—88,488	—0·40	7,83,944	—8,72,432	484	105·81
1932-33 .	59·93	2,21,60,966	14,36,589	—22,156	—0·10	7,88,387	—8,10,543	460	101·55
1933-34 .	59·93	2,22,43,526	13,08,510	—92,349	—0·42	7,89,746	—8,82,095	419	107·06

Separate statistics have been discontinued with effect from the year 1934-35.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*n*) Kangra Valley Railway (2′ 6″ gauge)—

The construction of this line by the State agency was sanctioned in Railway Board's Notification No. 802-P., dated the 1st February 1926.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Pathankot to Joginder Nagar . . .	1-12-28* 1-4-29†	102·99	102·99	* For goods traffic. † For passenger traffic.

Details of construction—

Permanent-way.—60, 60½, 61 and 62-lb. standard steel flat-footed rails on deodar cut jarrah and treated chir S. S. sleepers.

Ballast.—Earth packing except in small sections where shingle or gravel has been used.

Fencing.—The line is unfenced.

Curves.—Sharpest curve 30° (191 ft. radius).

Gradients.—The steepest gradient is 1 in 25 compensated.

Statistics of working—

NOTE:—The figures in this table are also included in the Statistics of working of the North Western Railway (5′ 6″ gauge); *vide* note on the top of the table of Statistics of working of that Railway.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1928-29 .	103·03	2,73,16,352	43,403	—2,45,529	—0·89	12,63,139	—15,08,668	33	665·69
1929-30 .	103·03	2,94,83,161	4,88,964	—3,79,509	—1·29	15,08,027	—18,87,536	91	177·61
1930-31 .	102·99	2,97,69,624	7,74,543	—6,60,438	—2·22	16,88,704	—23,49,142	144	185·27
1931-32 .	102·99	2,98,59,182	8,25,388	—3,86,111	—1·29	16,84,514	—20,70,625	153	146·76
1932-33 .	102·99	3,01,33,678	5,33,568	—4,73,163	—1·57	16,61,802	—21,34,965	99	185·18
1933-34 .	102·99	3,03,76,050	4,48,963	—4,87,852	—1·61	16,42,839	—21,30,691	84	208·66
1934-35 .	102·99	3,03,98,689	3,97,812	—6,36,790	—2·09	15,80,143	—22,16,933	74	260·73
1935-36 .	102·99	3,03,93,189	3,63,573	—6,99,676	—2·30	15,34,995	—22,34,671	68	292·44
1936-37 .	102·99	3,08,95,438	3,49,129	—7,57,284	—2·45	14,80,120	—22,37,404	65	316·90
1937-38 .	102·99	3,09,36,038	3,52,782	—7,48,739	—2·42	14,71,589	—22,20,328	66	312·24
1938-39 .	*102·99	3,10,12,791	3,46,659	—6,47,569	—2·09	14,55,798	—21,03,367	69	286·80

* Includes 14·53 miles from Baijnath Paprola to Jogindernagar closed to public traffic.

NOTE:—1. Capital expenditure shown in column 3 against 1929-30 includes both construction and open line capital.

2. The amount of guarantee against loss in net earnings to a maximum of Rs. 4 per annum for 13 years is payable by the Punjab Government as agreed upon (*vide* Secretary to Government Punjab P. W. D. Buildings and Road Branch No. 60/21/847-G.S., dated the 3rd September 1925 to the Railway Board). The adjustment of the guarantee for 1929-30 will be made in 1930-31.

(*o*) *and* (*r*). Trans-Indus (Mari Indus-Kalabagh-Bannu) railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
(*o*) *Main line*—Commercial.			
Kalabagh to Bannu	15-6-13	88·33	
(*r*) *Extensions.*—			
Laki Marwat *vid* Pezu to Tank } Strategic line . .	1-5-16	46·52	
Tank to Kaur } Strategic line . .	13-2-22	11·82	
Kaur to Manzai } Strategic line . .	15-5-21	10·81	
Total open mileage .	..	..	157·48

Details of construction—

Permanent-way.—The section Mari Indus to mile 2 is laid with S. S. 75-lb. rails. From mile 2 to Bannu, and mile 21 to Pezu station on the L. P. T. (which is a hill section) is laid with 50-lb. flat-footed rails. The Tank-Kaur-Manzai section is laid with 60 and 62-lb. flat-footed steel rails; the rest are 40-lb. rails. Either N. G. sal or soft wood cuts from B. G. sleepers have been used on this section.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*o*) *and* (*r*). Trans-Indus (Mari Indus-Kalabagh-Bannu) railway (2′ 6″ gauge)—*contd.*

Details of construction—*contd.*

Ballast.—The Kalabagh-Bannu section is ballasted with sand and stone and so is the ghat section of the Laki-Pezu Tank Railway. The rest is earth-packed.

Fencing.—The line is mainly unfenced except in station yards and the road side between Gambila and Bannu and Gul Imam and Tank.

Curves.—The radius of the sharpest curve is 360 ft. on the Kaur-Manzai section and 404·5 ft. on the Laki-Pezu section.

Gradients.—The ruling gradient is 1 in 100 between Mari-Indus and Bannu, and between Tank and Kaur; between Kaur and Manzai, it is 1 in 50 compensated and between Laki Marwat and Tank it is 1 in 45.

Contract—

Nil. The line is owned and worked by the State.

Statistics of working—

NOTE.—The figures in this table are also included in the Statistics of Working of the North Western Railway (5′ 6″ gauge)—*vide* note on the top of the table of Statistics of Working of that Railway.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2.	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14 .	88·91	68,27,036	2,18,035	46,490	0·68	59	78·68
1914-15 .	88·91	81,82,561	3,45,918	—16,416	..	75	104·75
1915-16 .	88·91	92,27,536	3,61,243	—34,678	..	78	109·60
1916-17 .	135·39	97,62,951	4,21,571	19,450	0·20	61	95·59
1917-18 .	135·38	1,07,54,744	6,63,082	—75,533	..	94	111·39
1918-19 .	135·38	1,20,89,285	7,12,483	—1,83,822	..	101	125·80
1919-20 .	135·36	1,37,50,432	11,18,571	—4,96,176	..	158	144·35
1920-21 .	135·38	1,67,58,821	12,25,464	—12,25,464	..	174	197·96
1921-22 .	161·55	1,81,97,345	12,80,600	—15,87,873	..	181	223·99
	Com. secn. / Milv. secn.	Com. secn. / Milv. secn.	Com. secn. / Milv. secn.	Com. secn. / Milv. secn.	Com. secn. / Milv. secn.	Com. secn. / Milv. secn.	Com. secn. / Milv. secn.
1922-23 .	136·21 / 25·51	1,51,13,078 / 33,17,595	13,98,936 / 80,200	—10,51,711 / —1,74,699	.. / ..	198 / 60	175·18 / 317·80
1923-24 .	136·20 / 25·50	1,52,27,620 / 32,73,382	16,59,015 / 1,15,135	—1,87,233 / —97,724	.. / ..	233 / 86	111 28 / 184·87
1924-25 .	88·90 / 72·80	1,03,06,156 / 85,47,563	12,56,229 / 3,98,337	—4,98,395 / 38,924	.. / 0·45	271 / 104	139·67 / 90·10
1925-26 .	88·90 / 72·80	1,03,18,751 / 85,88,157	11,35,019 / 2,83,199	—2,75,444 / —82,288	.. / .	246 / 75	124·27 / 129·05
1926-27 .	88·90 / 72·80	1,03,58,025 / 85 50,816	10,68,204 / 1,87,136	—3,65,742 / —2,11,039	.. / ..	229 / 49	134·49 / 212·77
1927-28 .	88·90 / 72·80	1,03,90,181 / 85,48,330	9,64,600 / 1,53,036	—5,85,622 / —3,13,665	.. / ..	208 / 40	160·71 / 304·96
1928-29 .	88·90 / 70·00	1,03,61,479 / 84,09,456	9,96,870 / 1,58,235	—5,92,678 / —2,62,692	—5·72 / —3·12	215 / 42	159·45 / 266·01
1929-30 .	88·90 / 69·68	1,03,97,921 / 84,26,998	10,50,278 / 1,67,877	—5,86,664 / —2,15,470	—5·64 / —2·56	227 / 46	155·85 / 228·35
1930-31 .	88·90 / 69·68	1,03,27,305 / 85,36,852	8,56,957 / 1,80,064	—6,45,010 / —2,79,715	—5·98 / —3·27	185 / 50	175·27 / 255·34
1931-32	88·46 / 69·02	1,09,10,410 / 84,99,809	6,72,663 / 1,33,755	—5,45,437 / —2,33,232	—5·00 / —2·74	145 / 37	181·08 / 274·36
1932-33	88·46 / 69·02	1,00,31,823 / 84,99,230	6,30,893 / 1,20,717	—4,15,751 / —2,38,387	—4·14 / —2·80	137 / 34	165·91 / 297·47
1933-34 .	88·46 / 69·02	1,00,82,011 / 85,18,239	6,24,428 / 1,07,902	—4,77,208 / —3,09,954	—4·78 / —3·64	135 / 30	176·42 / 387·28

Separate statistics have been discontinued with effect from the year 1934-35.

(*p*) Zhob Valley Railway (2′ 6″ gauge) (Military Line)—

This line which had been constructed as an assisted siding of a private company and in use as such from 3rd September 1917 was acquired by the State and incorporated with the North Western Railway with effect from the 1st January 1921.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Khanai to Hindubagh	*1-1-21	16·00		* For goods traffic in local booking only
Hindubagh to Killa Saifullah	2-5-27	39·42		
Killa Saifullah to Fort Sandeman . . .	†15-1-29 ‡15-7-29	88·42		† For goods traffic. ‡ For passenger traffic.
Total open mileage .	..	..	173·84	

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb., 60-lb. and 60½-lb. flat-footed steel on deodar and jarrah mixed sleepers without bearing plates on the Khanai-Hindubagh section, and 35-lb., 60-lb. and 61-lb. flat-footed steel on jarrah and deodar B. G. cuts without bearing plates on steel sleepers on the Hindubagh-Killa Saifulla section, and 60 lb., 61-lb. and 62-lb. flat-footed rails on deodar sleepers without bearing plates on the Killa Saiful'ah Fort Sandeman Section.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*p*) **Zhob Valley Railway** (2′ 6″ gauge) (Military Line)—*concld.*

Ballast.—*Nil.* The track is packed with the mixture of stone and earth obtained at site. No ballast has been provided between Hindubagh and Killa Saifullah, from Killa Saifullah to Fort Sandeman stone ballast is provided for points and crossings and at the approaches to bridges and level crossings used by vehicular traffic.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 573 feet. Hindubagh to Killa Saifullah is 728·75 feet radius.

Gradients.—The maximum gradient is 1 in 58 between Hindubagh and Killa Saifullah and 1 in 50 compensated between Killa Saifullah and Fort Sandeman and 1 in 40 compensated between Khanai and Hindu Bagh.

Contract—

Nil. The line is owned and worked by the State.

Statistics of working—

NOTE :—The figures in this table are also included in the Statistics of working of the North Western Railway (5′ 6″ gauge)—*vide* note on the top of the table of Statistics of working of that Railway.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1922-23 .	46·00	34,38,205	57,986	—81,763	..	24	241 00
1923-24 .	46·00	34,61,369	62,471	—1,59,548	..	26	355·39
1924-25 .	46·00	38,70,621	99,785	—2,50,536	..	42	350·97
1925-26 .	46·00	39,05,819	95,034	—1,90,118	..	40	309·52
1926-27 .	46·00	39,27,533	1,41,525	—1,59,611	..	59	212·79
1927-28 .	85·42	59,04,012	1,94,929	—4,71,426	..	44	341·85
1928-29 .	174·06	1,05,28,060	2,28,374	—4,38,480	—4·16	25	292·00
1929-30 .	173·84	1,16,72,331	4,68,931	—10,90,383	—9·34	52	332·53
1930-31 .	173·84	1,18,17,387	4,48,617	—9,17,325	—7·76	49	304·48
1931-32 .	173·84	1,19,23,261	3,18,737	—10,07,070	—8·45	35	415·95
1932-33 .	173·84	1,19,71,231	2,43,551	—8,11,529	—6·78	27	433·21
1933-34 .	173·84	1,19,83,225	2,59,401	—7,23,437	—6·04	29	378·89
Separate statistics have been discontinued with effect from the year 1934-35.							

(*q*) **Kohat-Thal Railway** (2′ 6″ gauge) (Military Line)—

Originally the line was on the 2′ 6″ gauge from Khushalgarh, from which place to Kohat it was converted into 5′ 6″ gauge and merged in the North Western railway proper in 1908.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total
1	2	3	4
Kohat to Thal	1-4-03	61·86	61·86

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*q*) Kohat-Thal Railway (2′ 6″ gauge) (Military Line)—*concld.*

Details of construction—

Permanent-way.—The line is laid partly with 41½ lb, and partly with 35 lb, 40 lb, 60 lb. and 62 lb. flat-footed rails on wooden sleepers. On bridges the rails are 90 lb.

Ballast.—The line is ballasted throughout with broken stone

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 239 feet radius

Gradients.—The ruling gradient is 1 in 100

Contract—

Nil. The line is owned and worked by the State.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and Appendix 1 to the Report for 1913-14)—

Note.—The figures in this table are also included in the Statistics of Working of the North Western Railway (5′ 6″ gauge)—*vide* note on the top of the table of Statistics of working of that Railway.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of the year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	61·75	43,40,614	1,38,223	—6,799	..	43	104·92
1914-15	61·75	43,90,461	1,40,464	—58,750	..	44	141·82
1915-16	61·75	44,14,291	1,84,518	—29,211	..	57	115·35
1916-17	61·75	42,59,194	1,73,037	+7,430	0·16	45	96·02
1917-18	61·75	42,74,892	1,85,671	—18,174	..	57	109·93
1918-19	61·75	42,79,042	1,71,031	—52,649		53	119·09
1919-20	61·75	42,32,061	2,70,361	—1,9[illegible]895	..	84	113·56
1920-21	61·75	42,27,85[illegible]	1,96,129	—[illegible]2,557	..	61	295·05
1921-22	61·75	44,0[illegible],50	2,08,284	—2,1[illegible],900	..	65	216·76
1922-23	61·7[illegible]	45,[illegible],5 5	[illegible],802	—3,0[illegible],202	..	69	236·92
1923-24	61·75	41,02,8[illegible]	[illegible],601	—2,16,634	..	73	191·56
1924-25	61·75	44,90,66[illegible]	,66,737	—3,46,999		52	308·05
1925-26	61·75	[illegible] 9,75	2,27,[illegible]54	2,73,462	..	74	[illegible]5·36
1926-27	61·75	45,35,156	2,19,280	—3,46,525	..	68	258·02
1927-28	61·75	45,78,184	2,18,470	—3,40,949	..	68	256·06
1928-29	61·75	45,84,636	1,72,644	—3,90,370	—8·51	54	326·11
1929-30	61·75	46,48,433	1,63,412	—4,36,901	—9·40	51	367·36
1930-31	61·75	47,34,905	1,45,210	—4,49,143	—9·48	45	409·31
1931-32	61·86	47,66,524	1,28,014	—3,49,209	—7·33	40	372·80
1932-33	61·86	47,77,931	1,29,774	—3,82,638	—8·01	40	394·86
1933-34	61·86	47,91,434	1,01,350	—3,34,648	—6·98	31	430·18

Separate statistics have been discontinued with effect from the year 1934-35.

(*r*) Please see under item (*o*).

(*s*) Jacobabad-Kashmor Railway (2′ 6″ gauge)

Managing Agents.—Messrs. Forbes, Forbes, Campbell & Co., Karachi

Date of registration of the Company.—30th April 1913.

The construction of this line by the Upper Sind Light Railways, Jacobabad-Kashmor Feeder Company, Limited, was sanctioned under Railway Board's Notification No. 282, dated the 16th October 1913.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Jacobabad to Kashmor	1-12-14	76·46	76·46

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb flat-footed British standard steel rails on sal and S. S. deodar sleepers.

Ballast.—The line is not ballasted.

Fencing.—The line is unfenced, except round Jacobabad station yard.

Curves.—The sharpest curve is of 935 feet radius.

Gradients.—The ruling gradient is 1 in 200.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(s) Jacobabad-Kashmor Railway (2′ 6″ gauge)—*contd.*

Contract—

Dated the 29th July 1916, *between the Secretary of State and the Upper Sind Light Railways, Jacobabad-Kashmor Feeder Company, Limited,* as to the construction, maintenance, management and working of the Jacobabad-Kashmor railway.

Railway Board's letter No. 225—2547-P., dated the 5th August 1915, sanctioning the raising of an additional capital of Rs. 2 lakhs for the completion of the Jacobabad-Kashmor Railway.

Main provisions of contract—

(i) *Land.*—In British territory provided by Government free of cost

(ii) *Government aid.*—By way of rebate the Government allow to the Company, in respect of each year, such a sum, not exceeding the net earnings of the North Western Railway derived from all traffic (except stores) interchanged between the North Western Railway and the said railway as shall, together with the net earnings of the Company, be equal to the interest for the year at a rate of 5 per cent. per annum on the actual expenditure charged in the Capital Account. Government also allow subject to the conditions mentioned in clause 6, Schedule II of the contract, a sum of Rs. 7,500 for or towards office expenses and the expenses of management and direction of the Company, as also all such legal expenses as are properly incurred by the Company and approved by the Secretary of State or the Government of India, and as are under the provisions of the contract debitable to Revenue.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } For management, maintenance and working Government retain 45 per cent. of the gross earnings of the said railway, the remainder constituting the net earnings is paid to the Company. But should the net earnings of the Company in any year exceed the minimum amount sufficient to pay a dividend of 5 per cent. per annum, such excess is to be applied towards the payment of office expenses and expenses of management and direction of the Company for the year up to a limit of Rs. 7,500, the balance, if any, being divided equally between Government and the Company. Provided that if the surplus profits are insufficient to meet the administration charges, the balance will be paid to the Company by the working agency out of the stipulated amount retained by the latter as working expenses.

(v) *Rates and fares.*—To be sanctioned by the Secretary of State within the minimum and maximum in force on, and the classification of goods to be in conformity with that of, the North Western Railway

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin and the persons in charge thereof.— } To be carried in all respects as far as practicable in the same manner and subject to the same regulations and control by the Secretary of State as the same are carried on the North Western Railway.

(vii) *Power of the Government to determine contract.*—The Government may, by giving 12 months' previous notice of purchase, in writing, determine the contract either on the 31st March 1945 or on the 31st March in the last year of any subsequent period of 10 years by paying to the Company in rupees 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years immediately preceding the date of determination subject to a limit of 20 per cent. in excess of, but not less than, the total capital expenditure of the Company.

The Government may also, by giving 12 months' previous notice of "special purchase," determine the contract at any time in the following cases :—

(*a*) When it is considered desirable to alter the gauge of the railway.

(*b*) When it is considered desirable to convert the railway into a line of through communication.

(*c*) When the Secretary of State desires to extend the said railway (without altering the gauge or making the line part of a through route) and the Company is unable or unwilling to supply the necessary capital for such extension.

If the contract shall be determined by notice of "special purchase," the Government will pay to the Company in rupees 25 times the average of the yearly net earnings (excluding payments on account of rebate) during the 3 years preceding the date of determination or 115 per cent. of the total capital expenditure, whichever may be the greater.

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(s) Jacobabad-Kashmor Railway (2′ 6″ gauge)—*concld.*

(viii) *Power of the Company to surrendr contract.*—Nil.

Statistics of working—

Year	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate and administrative charges from North Western Railway (+) or share of surplus profits payable to the Secretary of State in England (—).	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1914-15	76·70	20,99,487	21,420	11,781	0·56	..	11,781	0·56	16	45·00
1915-16	76·74	22,21,742	1,36,347	74,991	3·38	+26,442	1,01,433	4·56	34	45·00
1916-17	76·70	22,57,892	1,49,121	67,104	2·97	+30,127	97,231	4·30	37	45·00
1917-18	76·70	21,84,818	1,34,280	73,854	3·38	+60,373	1,34,227	6·14	34	45·00
1918-19	76·70	22,16,490	1,32,591	72,925	3·29	+24,786	97,711	4·41	33	45·00
1919-20	76·70	12,33,067	24,858	13,672	0·61	+1,04,441	1,18,113	5·29	6	45·00
1920-21	76·70	22,37,813	160	88	..	+1,19,159	1,19,247	5·33	..	45·00
1921-22	76·70	22,57,403	1,50,117	82,949	3·67	+36,453	1,19,402	5·29	37	45·00
1922-23	76·70	22,85,967	2,25,113	1,23,812	5·42	—911	1,22,448	5·38	56	45·00
1923-24	76·70	23,06,709	1,88,160	1,03,488	4·48	+30,257	1,33,745	5·79	47	45·00
1924-25	76·70	23,62,051	1,94,246	1,06,835	4·52	+21,502	1,28,337	5·43	49	45·00
1925-26	76·70	24,35,830	2,13,306	1,17,318	4·82	+7,349	1,24,667	5·12	54	45·00
1926-27	76·70	24,37,297	2,09,621	1,15,292	4·73	+23,015	1,38,307	5·67	53	45·00
1927-28	76·70	24,27,084	2,23,109	1,22,710	5·05	+10,422	1,33,132	5·48	56	45·00
1928-29	76·70	24,38,540	1,89,352	1,04,144	4·27	+24,997	1,29,141	5·29	47	45·00
1929-30	76·46	24,37,386	1,87,393	1,03,066	4·22	+26,332	1,29,398	5·31	47	45·00
1930-31	76·46	24,37,300	2,04,352	1,12,394	4·61	+17,130	1,29,524	5·31	34	45·00
1931-32	76·46	24,38,786	1,59,434	87,689	3·60	+41,713	1,29,402	5·31	40	45·00
1932-33	76·46	24,41,115	1,62,823	89,553	3.67	+39,945	1,29,498	5·30	41	45·00
1933-34	76·46	24,41,123	1,65,182	90,850	3·72	+38,706	1,29,556	5·31	41	45·00
1934-35	76·46	24,44,641	1,42,791	78,535	3·21	+51,109	1,29,644	5·30	36	45·00
1935-36	76·46	24,49,054	1,37,759	75,767	3·09	+54,075	1,29,842	5·30	34	45·00
1936-37	76·46	24,55,562	1,48,777	81,827	3·33	+48,288	1,30,115	5·30	37	45·00
1937-38	76·46	24,57,883	1,78,908	98,399	4·00	+32,009	1,30,408	5·31	45	45·00
1938-39	76·46	24,59,346	1,63,294	89,812	3·65	+40,735	1,30,547	5·31	41	45·00

(t) Larkana-Jacobabad Railway (2′ 6″ gauge)—

Managing Agents.—Messrs. Forbes, Forbes, Campbell & Co., Karachi.

Date of registration of the Company.—1916.

The construction of this line by the Sind Light Railway Company was sanctioned under Railway Board's Notification No. 452-P., dated the 9th March 1916.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Larkana to Shahdadkot	16-2-22	31·80	
Shahdadkot to Dodapur	1-10-23	21·42	
TOTAL	..	..	53·22

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb flat-footed steel rails laid on deodar sleepers

Ballast.—The line is ballasted with brick for a short distance on each side of all bridges and at points and crossings.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 573 feet.

Gradients.—The line has a grade of 1 in 500 except at the approaches on each side of Namang Wah and Noor Wah where the grades are 1 in 200.

Agreement—

Dated the 5th February 1924 *between the Secretary of State and the Larkana-Jacobabad (Sind) Light Railway, Limited,* as to the construction, maintenance, and working of the Larkana-Jacobabad Railway.

Main provisions of agreement—

(i) *Land.*—Provided by the Government free of cost to the Company, in British territory (including land permanently or temporarily required for quarrying ballast, brick fields, and kindred purposes).

12. NORTH WESTERN RAILWAY SYSTEM—*contd*

(*t*) **Larkana-Jacobabad railway** (2′ 6″ gauge)—*concld.*

Main provisions of agreement—*concld.*

(ii) *Government aid.*—When the net receipts of the Company in any year shall not be sufficient to pay interest on the paid-up share capital of the Company at the rate of 5 per cent. per annum, the Secretary of State shall allow by way of rebate to the Company a sum not exceeding in any year the net earnings of the North Western Railway derived from all traffic interchanged between the North Western Railway and this Railway as shall together with the net earnings of the Company be equal to the interest for the year at 5 per cent. per annum on the paid-up share capital of the Company ; when the net earnings of the Company shall exceed the minimum amount sufficient to pay interest on paid up share capital such excess shall be applied for towards the payment of office expenses, and expenses of management and direction of the Company during such year up to the limit provided for in clause 6 of Schedule II.

(iii) *Terms of working.*—The Secretary of State shall work and maintain the Railway and maintain all necessary rolling-stock through the Agency of the North Western Railway or through any other Agency to be selected by him for 45 per cent. of gross earnings.

(iv) *Distribution of profits.*—When the net receipts of the Company exceed interest at 5 per cent. on the paid up share capital of the Company for the time being the office expenses and expenses of management of the Company to the limit provided for in clause 6 of Schedule II shall be a first charge on surplus profits, the balance being divided equally between Government and the Company. Provided that if the surplus profits are not sufficient to meet the administration charges the balance will be paid to the Company out of the stipulated percentage of the earnings of the said Railway to be retained by the Secretary of State as working expenses under clause 3 of this Schedule.

(v) *Rates and fares.*—The rates and fares for the carriage of goods and coaching traffic over the said Railway and the classification of goods thereon shall be in conformity with that from time to time in force on the North Western Railway

(vi) *Special obligations as to the conveyance of—*

(*a*) *Mails, troops, police, high Government officials and Government stores.—*
(*b*) *Government bullion and coin and the persons in charge thereof.—*

} To be conveyed at the same rates and under the same arrangements as apply to State Railways.

(vii) *Power of the Government to determine contract.*—The Government may by giving not less than 12 months' previous notice of purchase determine the contract either on the 31st March 1954 or on the 31st March in the last year of any subsequent period of 10 years a sum of money equal to 25 times the amount of the average of the yearly net earnings derived by the Company during the 3 years immediately preceding the date of purchase; but so that the total amount so payable to the Company shall not in any case exceed by more than 20 per cent. the total capital expenditure of the Company as appearing in the capital account of the Company or be less than such total capital expenditure.

The Government may also by giving to the Company 12 months' previous notice of " special purchase " determine this contract at any time in certain cases specified in Clause 45 (3) and pay, within four months from the date of determination, to the Company a sum equal to 25 times the average of the yearly net earnings derived by the Company during the three years preceding his date or 115 per cent. of the total capital expenditure of the Company as appearing in the Capital Account of the Company, whichever may be the greater.

Statistics of working—

Year.	Mileage open at end of the year.	Total capital outlay, including suspense, to end of the year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings	Percentage of net earnings on total capital outlay given in column (3).	Rebate from + or share of surplus profits payable to the (—) the North Western railway.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs		Rs.	Rs.		Rs.	
1921-22	31·53	21,99,000	2[illegible],523	11,838	0·54	—921	10,917	0 49	65	47·42
1922-23	31·80	22,85,000	1,74,531	95,992	4·20	—819	95,173	4·17	100	45·40
1923-24	53·24	28,30,761	1,91,724	1,06,449	3·72	+22,862	1,28,311	4·53	69	45·00
1924-25	53·24	30,23,576	2,28,368	1,25,603	4·15	+39,323	1,64,926	5·45	82	45·00
1925-26	53·24	30,28,987	2,39,807	1,31,894	4·35	+34,502	1,66,396	5·49	87	45·00
1926-27	53·24	30,29,907	2,32,728	1,28,000	4·22	+43,119	1,71,119	5·64	84	45·00
1927-28	53·24	30,33,793	2,48,066	1,36,436	4·49	+35,580	1,72,016	5·67	91	45·00
1928-29	53·24	30,43,359	2,43,151	1,33,733	4·39	+29,837	1,63,570	5·37	88	45·00
1929-30	53·22	30,44,852	2,37,108	1,30,409	4·28	+36,715	1,67,124	5·49	85	45·00
1930-31	53·22	30,41,129	2,40,478	1,32,263	4·35	+41,144	1,73,407	5·70	58	45·00
1931-32	53·22	30,45,343	2,01,366	1,10,751	3·60	+54,688	1,65,439	5·43	72	45·00
1932-33	53·22	30,45,514	1,93,652	1,06,509	3·50	+62,510	1,69,019	5·55	70	45·00
1933-34	53·22	30,58,477	2,43,365	1,33,851	4·38	+31,742	1,65,593	5·41	88	45·00
1934-35	53·22	30,59,467	2,40,908	1,32,499	4·33	+27,881	1,60,380	5·24	87	45·00
1935-36	53·22	30,61,040	2,40,808	1,32,444	4·33	+30,444	1,62,888	5·32	86	45·00
1936-37	53·22	30,68,825	2,62,173	1,44,195	4·70	+17,556	1,61,751	5·27	95	45·00
1937-38	53·22	30,73,166	2,83,164	1,55,740	5·07	+5,667	1,61,407	5·25	102	45·00
1938-39	53·22	30,74,147	2,49,278	1,37,103	4·46	+25,302	1,62,405	5·28	90	45·00

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*u*) Delhi-Umballa-Kalka Railway (5′ 6″ gauge)—

Statistics of Working [including the Jind-Panipat Railway (Indian State Section) from 1916-17].—

Note.—From 1926-27 the figures are included in the statistics of working of the North Western Railway (5′ 6″ gauge).

Year.	Mileage open at end of each year.		Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.		Gross earnings.	Net earnings.		Percentage of net earning on total capital outlay, given in column (4) & (5).		Delhi-Umballa-Kalka Railway, including British section of Jind-Panipat Railway.			Earnings per mile per week.	Proportion of expenses to earnings.
	Delhi Umballa-Kalka railway, including British section Jind-Panipat Railway.	Indian State section of Jind-Panipat Railway.	Delhi-Umballa Kalka Railway, including British section of Jind-Panipat Railway.	Indian State section of Jind-Panipat Railway.		Delhi Umballa-Kalka railway, including British section of Jind-Panipat Railway.	Indian State section of Jind-Panipat Railway.	Delhi-Umballa-Kalka Railway including British section of Jind-Panipat Railway.	Indian State section of Jind-Panipat Railway.	Subsidy from Government.	Total income.	Percentage of total income on total capital outlay given in column (4).		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Miles.	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.		Rs.	
1891 .	162·24	..	1,55,44,692	..	9,07,697	4,72,002	..	3·04	..	..	4,72,002	3·04	128	48·00
1892 .	161·40	..	1,58,22,137	..	10,81,769	5,62,520	..	3·56	..	..	5,62,520	3·56	129	48·00
1893 .	161·40	..	1,55,24,600	..	11,98,508	6,23,224	..	4·01	..	..	6,23,224	4·01	143	48·00
1894 .	161·40	..	1,55,25,547	..	13,37,526	6,95,514	..	4·48	..	..	6,95,514	4·48	159	48·00
1895 .	161·40	..	1,55,06,120	..	14,60,519	7,59,470	..	4·90	..	..	7,59,470	4·90	174	48·00
1896 .	160·47	..	1,54,49,783	..	13,18,840	6,85,797	..	4·44	..	..	6,85,797	4·44	158	48·00
1897 .	162·24	..	1,53,26,585	..	15,73,319	8,18,126	..	5·34	..	..	8,18,126	5·34	186	48·00
1898 .	162·24	..	1,53,43,587	..	16,07,512	8,35,906	..	5·45	..	..	8,35,906	5·45	191	48·00
1899 .	162·24	..	1,53,01,272	..	14,49,378	7,53,677	..	4·93	..	..	7,53,677	4·93	172	48·00
1900 .	162·24	..	1,53,15,467	..	13,72,523	7,13,712	..	4·66	..	..	7,13,712	4·66	163	48·00
1901 .	162·24	..	1,52,92,648	..	18,05,858	9,39,046	..	6·14	..	..	9,39,046	6·14	213	48·00
1902 .	162·24	..	1,54,23,791	..	18,66,695	9,70,681	..	6·29	..	..	9,70,681	6·29	221	48·00
1903 .	162·36	..	1,55,49,998	..	18,30,960	9,52,099	..	6·12	..	..	9,52,099	6·12	216	48·00
1904 .	162·36	..	1,55,51,763	..	18,53,475	9,63,807	..	6·20	..	..	9,63,807	6·20	218	48·00
1905 .	162·36	..	1,56,97,499	..	20,16,936	10,48,807	..	6·72	..	..	10,48,807	6·72	238	48·00
1906 .	162·36	..	1,57,26,333	..	20,04,218	10,42,194	..	6·63	..	..	10,42,194	6·63	237	48·00
1907 .	162·36	..	1,58,23,198	..	23,04,659	11,98,423	..	7·57	..	..	11,98,423	7·57	272	48·00
1908 .	162·36	..	1,60,07,122	..	21,09,189	10,96,778	..	6·85	..	..	10,96,778	6·85	250	48·00
1909 .	162·36	..	1,66,56,595	..	22,90,710	11,91,169	..	7·15	..	..	11,91,169	7·15	271	48·00
1910 .	192·13	..	1,75,45,512	..	26,05,803	13,55,018	..	7·72	..	..	13,55,018	7·72	261	48·00
1911 .	192·12	..	1,77,78,158	..	31,53,021	16,39,571	..	9·22	..	..	16,39,571	9·22	316	48·00
1912 .	192·12	..	1,79,12,579	..	32,30,326	16,79,769	..	9·38	..	..	16,79,769	9·38	323	48·00
1st qr. '13	192·12	..	1,79,34,924	..	8,36,556	4,35,009	..	2·43	..	..	4,35,009	2·43	335	48·00
1913-14 .	192·12	..	1,80,32,784	..	31,67,202	16,46,945	..	9·13	..	..	16,46,945	9·13	317	48·00
1914-15 .	191·64	..	1,84,33,052	..	32,15,603	16,72,114	..	9·07	..	..	16,72,114	9·07	323	48·00
1915-16 .	191·64	..	1,92,01,786	..	31,82,987	16,55,153	..	8·62	..	..	16,55,153	8·62	319	48·00
1916-17 .	206·40	25·90	1,94,98,488	15,99,054	36,59,888	18,85,843	17,299	9·67	1·08	..	18,85,843	9·67	303	48·00
1917-18 .	206·40	25·90	1,95,27,500	16,74,021	44,31,206	22,47,872	56,355	11·51	3·37	..	22,47,872	11·51	367	48·00
1918-19 .	206·40	25·90	1,95,93,091	17,60,028	45,55,146	22,92,784	75,892	11·70	4·31	..	22,92,784	11·70	377	48·00
1919-20 .	206·40	25·90	1,96,64,414	17,83,310	51,01,870	25,74,652	78,320	13·09	4·39	..	25,74,652	13·09	422	48·00
1920-21 .	206·49	25·90	1,97,57,624	17,96,745	53,52,382	27,04,913	78,326	13·69	4·36	..	27,04,913	13·69	443	48·00
1921-22	206·40	25·90	1,99,12,989	17,96,745	48,59,647	24,62,822	64,195	12·37	3·57	..	24,62,822	12·37	402	48·00
1922-23 .	206·40	25·90	2,00,70,024	17,30,450	56,16,157	28,35,811	84,591	14·13	4·89	..	28,35,811	14·13	465	48·00
1923-24 .	206·51	25·90	2,00,70,888	17,30,450	52,23,410	26,35,098	81,075	13·13	4·69	..	26,35,098	13·13	432	48·00
1924-25 .	206·51	25·90	2,00,92,038	17,30,529	57,08,353	28,79,333	89,011	14·33	5·14	..	28,79,333	14·33	472	48·00
1925-26 .	205·76	25·90	2,00,92,038	17,30,529	53,39,491	27,18,810	89,365	13·53	5·16	..	27,18,810	13·53	443	48·00

12. NORTH WESTERN RAILWAY SYSTEM—*contd.*

(*v*) Southern Punjab Railway (Main Line) (5′ 6″ gauge).

NOTE.—From 1929-30 the figures are included in the statistics of working of the North Western Railway (5′ 6″ gauge).

Statistics of Working—

Year.	Mileage open at end of each year.	Total capital outlay including suspense to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total outlay given in column (3).	Rebate from N. W. Ry.(+), or share of surplus profits, payable to the Secretary of State in England (—).	Total income.	Percentage of to tal income on total capital in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		
1897 . .	399·80	1,99,08,813	1,61,038	77,298	0·39	+19,942	97,240	0·49	52	52·00	Adjustments under the Cripps, award were brought into account in 1901, but in these statistics they have been adjusted and allocated to the proper years.
1898 . .	399·80	2,23,62,921	16,29,122	7,81,978	3·49	..	7,81,978	3·49	74	52·00	
1899 . .	423·18	2,26,68,262	16,11,010	7,73,285	3·41	+17,318	7,90,603	3·48	73	52·00	
1900 . .	423·93	2,26,57,063	16,36,280	7,89,360	3·48	+3,562	7,92,922	3·50	74	52·00	
1901 . .	423·93	2,25,70,734	24,96,333	11,98,240	5·31	—2,53,275	9,44,965	4·19	113	52·00	
1902 . .	424·72	2,27,93,660	19,41,541	9,31,940	4·09	—89,973	8,41,967	3·69	88	52·00	
1903 . .	425·33	2,28,27,906	21,59,158	10,36,396	4·54	—1,16,614	9,19,782	4·03	98	52·00	
1904 . .	425·33	2,29,43,454	27,47,442	13,18,772	5·74	—2,40,817	10,77,955	4·70	124	52·00	
1905 . .	425·33	2,30,13,696	36,40,372	17,47,379	7·59	—4,54,082	12,93,297	5·62	165	52·00	
1906 . .	425·33	2,31,30,148	41,67,059	20,00,188	8·65	—5,76,959	14,23,229	6·15	188	52·00	
1907 . .	423·75	2,31,79,761	50,37,456	24,17,978	10·43	—7,76,243	16,41,735	7·08	228	52·00	
1908 . .	423·75	2,33,22,671	44,44,156	21,33,194	9·14	—6,28,229	15,04,965	6·45	202	52·00	
1909 . .	424·06	2,35,69,932	33,15,733	15,91,551	6·75	—3,56,959	12,34,592	5·24	150	52·00	
1910 . .	424·06	2,39,18,571	43,21,320	20,74,234	8·67	—5,94,776	14,79,458	6·19	196	52·00	
1911 . .	424·06	2,43,04,411	50,29,087	24,13,962	9·93	—7,56,864	16,57,098	6·82	228	52·00	
1912 . .	424·06	2,47,35,830	58,22,883	28,23,784	11·41	—9,56,408	18,67,376	7·55	264	52·00	
1st qr. of 1913	424·06	2,49,47,567	10,97,941	5,27,012	2·11	—1,47,261	3,79,751	1·52	199	52·00	
1913-14 .	424·06	2,56,22,112	57,93,323	27,80,795	10·85	—9,22,290	18,58,505	7·25	263	52·00	
1914-15 .	424·06	2,62,48,269	52,97,182	25,42,648	9·69	—7,77,584	17,65,064	6·72	240	52·00	
1915-16 .	424·06	2,70,79,223	63,24,202	30,34,181	11·20	—10,22,377	20,11,804	7·43	285	52·00	
1916-17 .	425·92	2,72,88,117	55,33,401	26,54,729	9·73	—8,46,087	18,08,642	6·63	250	52·00	
1917-18 .	425·92	2,73,85,003	73,26,791	35,18,639	12·85	—14,58,431	20,60,208	7·52	331	52·00	
1918-19 .	426·23	2,75,40,080	91,72,226	44,04,817	15·99	—20,95,975	23,08,842	8·38	414	52·00	
1919-20 .	425·95	2,77,68,602	73,71,910	35,37,071	12·74	—15,27,723	20,10,248	7·24	333	52·00	
1920-21 .	425·95	2,83,42,034	81,52,678	39,13,838	13·81	—14,69,918	24,43,920	8·62	368	52·00	The figures of Secretary of State share of surplus profits from S. P. Railway have been accounted for up to end of 31st December 1929.
1921-22 .	425·08	2,86,34,201	72,06,416	34,61,220	12·09	—12,02,694	22,58,535	7·89	326	52·00	
1922-23 .	425·07	2,89,74,348	80,87,022	38,81,768	13·40	—13,94,244	24,87,524	8·59	366	52·00	
1923-24 .	427·63	2,90,84,973	1,03,35,119	49,63,412	17·07	—19,55,104	30,08,308	10·34	465	52·00	
1924-25 .	427·63	2,92,34,179	1,08,95,796	52,27,275	17·88	—21,22,257	31,05,018	10·62	490	52·00	
1925-26 .	427·63	2,95,52,162	92,47,203	44,29,911	14·99	—17,23,790	27,06,121	9·16	416	52·00	
1926-27 .	427·63	2,95,92,532	1,00,36,961	48,18,393	16·28	—19,18,565	29,09,829	9·83	451	52·00	
1927-28 .	427·63	2,98,14,150	1,05,19,896	50,49,574	16·94	—20,25,78	30,23,794	10·14	473	52·00	
1928-29 .	427·53	3,03,28,067	1,10,85,683	53,21,128	17·54	—21,53 154	3 ,67,974	10·44	499	52·00	
1929-30 .	..	3,05,51,179	76,69,080	36,81,590	..	+37,63,45[illegible]	..	.	..	..	

(*w*) Southern Punjab Railway (Jullundur Doab Extension) (5′ 6″ gauge).

NOTE.—From 1929-30 the figures are included in the statistics of working of the North Western Railway (5′ 6″ gauge).

Statistics of Working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western Railway (+) or share of surplus profits payable to the Secretary of State in England (—).	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings	Gain on exchange in respect of the Company's remittances 4ths of which has been paid to the Secretary of State in England as share of surplus profits.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs		Rs.		Rs
1912 . . .	28·25	1,01,82,301	8,129	3,902	0·03	..	3,902	0·03	13	52·00	
1st qr. of 1913 .	32·73	1,10,18,745	29,673	14,243	0·13	+17,640	31,892	0·29	70	52·00	..
1913-14 . .	102·97	1,32,49,258	2,62,639	1,26,067	0·95	+1,72,394	2,98,461	2·25	60	52·00	.
1914-15 . .	133·48	1,31,32,305	4,49,006	2,15,523	1·64	+3,52,781	5,68,304	4·33	85	52·00	.
1915-16 . .	130·19	1,32,91,134	4,52,087	2,17,002	1·63	+3,81,506	5,98,508	4·50	66	52·00	.
1916-17 . .	130·19	1,32,40,677	4,63,283	2,22,376	1·68	+3,72,278	5,94,654	4·49	68	52·00	..
1917-18 . .	130·19	1,32,44,224	4,18,204	2,00,738	1·51	+3,05,260	5,05,998	4·50	62	52·00	..
1918-19 . .	130·19	1,32,56,207	4,30,211	2,06,502	1·56	+3,90,090	5,96,592	4·50	64	52·00	..
1919-20 . .	130·19	1,32,84,927	4,67,409	2,24,366	1·68	+3,72,491	5,96,847	4·50	69	52·00	90,062
1920-21 . .	130·19	1,33,07,050	6,08,493	2,92,076	2·19	+3,06,033	5,98,109	4·50	90	52·00	38,775
1921-22 . .	130·19	1,33,55,657	6,26,797	3,00,862	2·25	+2,99,248	6,00,110	4·50	93	52·00	12,887
1922-23 . .	132·79	1,34,10,587	7,02,900	3,37,436	2·52	+2,64,706	6,02,142	4·50	102	52·00	698
1923-24 . .	132·79	1,34,23,803	7,24,048	3,47,544	2·58	+2,55,482	6,03,026	4·50	105	52·00	16,087
1924-25 . .	132·79	1,35,13,357	8,25,430	3,96,206	2·93	+2,09,075	6,05,281	4·50	120	52·00	47,361
1925-26 . .	132·79	1,34,96,026	8,33,031	3,99,855	2·96	+2,05,343	6,05,198	4·50	121	52·00	49,791
1926-27 . .	132·79	1,35,72,201	8,00,052	3,84,025	2·83	+2,24,395	6,08,420	4·50	116	52·00	45,840
1927-28 . .	132·79	1,35,72,301	8,34,392	4,00,508	2·95	+2,08 807	6,09,315	4·50	121	52·00	48,948
1928-29 . .	132·79	1,36,04,678	7,79,028	3,73,934	2·75	+2,37,015	6,10,949	4·50	113	52·00	49,026
1929-30 . .	..	1,36,21,662	5,84,703	2,80,658	..	—1,78,362	..	..	..	..	-

12. NORTH WESTERN RAILWAY SYSTEM—*concld.*

(*x*) Southern Punjab Railway (Ludhiana Extension) (5′ 6″ gauge)—

Note.—From 1929-30 the figures are included in the statistics of working of the North Western Railway (5′ 6″ gauge).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western Railway (+) or share of surplus profits payable to the Secretary of State in England (—).	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1905	77·05	70,09,669	73,332	35,200	0·50	+10,500	45,700	0·65	33	52·00
1906	155·05	79,33,781	6,29,557	3,02,187	3·81	+56,692	3,58,879	4·52	78	52·00
1907	152·04	83,43,814	8,98,142	4,31,198	5·17	—15,147	4,15,961	4·99	113	52·00
1908	152·04	87,92,087	8,31,931	3,99,327	4·54	+29,270	4,28,597	4·87	105	52·00
1909	152·04	89,06,132	7,88,692	3,78,573	4·25	+65,713	4,44,286	4·98	100	52·00
1910	152·04	89,40,892	10,03,716	4,81,784	5·39	—24,458	4,57,323	5·11	127	52·00
1911	152·04	89,83,708	10,90,618	5,23,497	5·82	—56,014	4,67,483	5·20	138	52·00
1912	152·04	90,15,837	11,77,568	5,65,233	6·26	—84,060	4,81,173	5·34	149	52·00
1st qr. of 1913	152·04	90,16,169	2,88,228	1,38,349	1·53	—19,327	1,19,022	1·32	146	52·00
1913-14	152·04	91,86,178	13,47,598	6,46,847	7·04	—1,41,400	5,05,447	4·50	170	52·00
1914-15	152·04	92,45,584	12,04,864	5,78,334	6·25	—87,210	4,91,124	5·31	152	52·00
1915-16	152·04	92,71,455	12,50,601	6,00,289	6·47	—1,02,821	4,97,468	5·37	158	52·00
1916-17	152·04	92,90,490	13,06,790	6,27,260	6·75	—1,21,828	5,05,432	5·44	165	52·00
1917-18	152·04	93,29,624	12,80,758	6,14,763	6·59	—1,70,099	4,44,664	4·76	162	52·00
1918-19	152·04	93,29,397	13,50,518	6,48,249	6·95	—2,28,816	4,19,433	4·50	171	52·00
1919-20	152·04	93,33,498	12,64,186	6,06,810	6·50	—2,53,609	3,53,201	2·78	160	52·00
1920-21	152·04	93,33,258	14,97,498	7,18,800	7·70	—2,14,999	5,03,801	5·40	189	52·00
1921-22	152·04	93,37,229	16,05,281	7,70,535	8·25	—2,32,127	5,38,408	5·77	203	52·00
1922-23	153·34	94,74,714	19,21,826	9,22,477	9·74	—3,37,779	5,84,698	6·17	241	52·00
1923-24	153·35	97,05,189	24,73,327	11,82,796	12·19	—5,37,246	6,45,550	6·65	310	52·00
1924-25	153·35	97,04,845	26,73,645	12,88,678	13·28	—6,39,636	6,49,042	6·69	335	52·00
1925-26	153·35	98,45,882	22,91,201	11,02,889	11·20	—5,01,295	6,01,594	6·11	287	52·00
1926-27	153·35	99,22,716	20,39,686	9,80,979	9·89	—4,03,390	5,77,589	5·82	256	52·00
1927-28	153·35	99,44,239	18,83,203	9,04,229	9·09	—3,45,678	5,58,551	5·62	236	52·00
1928-29	153·35	99,48,870	19,26,213	9,24,582	9·29	—3,59,338	5,65,244	5·68	241	52·00
1929-30	..	99,86,367	13,50,578	6,48,278	..	+5,95,575	..	..	..	..

(*y*) Southern Punjab Railway (Sutlej Valley Extension) (5′ 6″ gauge)—

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) line partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from North Western Railway (+) or share of surplus profits payable to the Secretary of State in England (—).	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Gain on exchange in respect of the Company's remittances 4th of which has been paid to the Secretary of State in England as share of surplus profits.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		Rs.
1910	209·46	*1,54,94,559	2,89,668	1,39,041	0·90	+1,85,209	3,24,250	2·14	54	52·00	..
1911	208·19	1,52,17,748	5,66,486	2,71,914	1·79	+4,03,911	6,75,825	4·44	52	52·00	..
1912	208·19	1,52,28,474	5,17,652	2,48,473	1·63	+4,39,385	6,87,858	4·52	48	52·00	..
1st qr. of 1913	208·19	1,52,33,176	1,30,630	62,702	0·41	+1,08,963	1,71,665	1·13	48	52·00	..
1913-14	208·19	1,52,73,939	6,77,949	3,25,415	2·13	+3,60,743	6,86,158	4·49	63	52·00	..
1914-15	208·19	1,52,98,482	6,00,181	2,88,087	1·88	+3,99,533	6,87,620	4·49	55	52·00	..
1915-16	208·19	1,52,63,858	6,40,764	3,07,566	2·01	+3,78,208	6,85,774	4·49	59	52·00	..
1916-17	208·19	1,52,88,153	5,76,876	2,76,901	1·81	+4,10,268	6,87,169	4·49	53	52·00	..
1917-18	..	1,53,12,352	3,16,818	1,52,073	0·99	+5,36,587	6,88,660	4·50	49	52·00	..
1918-19	..	1,53,11,730	124	59	..	+6,88,927	6,88,986	4·50	..	52·00	..
1919-20	..	1,53,11,130	..	..	..	+6,89,013	6,89,013	4·50	..	..	1,04,037
1920-21	..	1,53,11,130	..	..	..	+6,89,000	6,89,000	4·50	..	..	44,912
1921-22	..	1,53,11,130	..	..	..	+6,89,000	6,89,000	4·50	..	..	15,675
1922-23	..	1,53,11,130	..	..	..	+6,89,000	6,89,000	4·50	..	..	1,259
1923-24	127·00	1,53,11,130	5,25,670	2,52,321	1·65	+4,36,679	6,89,000	4·50	80	52·00	19,272
1924-25	127·54	1,53,11,130	7,20,126	3,45,661	2·25	+3,43,339	6,89,000	4·50	109	52·00	54,887
1925-26	214·49	1,53,11,130	8,64,335	4,14,881	2·70	+2,74,119	6,89,000	4·50	77	52·00	57,611
1926-27	212·78	1,53,14,064	12,15,436	5,83,409	3·81	+1,05,639	6,89,048	4·50	110	52·00	53,116
1927-28	212·78	1,53,36,123	15,16,882	7,28,104	4·75	+17,783(*a*) —73,010(*b*)	6,72,877	4·40	137	52·00	(*a*) 28,242
1928-29	212·78	1,53,66,099	19,60,101	9,40,848	6·12	+3,270(*a*) —2,43,977(*b*)	7,00,141	4·56	177	52·00	..
1929-30	..	1,53,74,096	13,01,417	6,24,680	..	+3,95,038	..	..	..	..	..

* Includes Rs. 3,24,250 adjusted in 1911.

(*a*) For the ½ year ended 30th September.

(*b*) For the ½ year ended 31st March. This includes gain on exchange also as it can not be worked out separately.

Note.—(*i*) The figures in column 7 from 1st July 1917 to 25th November 1925 represent interest at 4½ per cent. on the rupee capital outlay paid to the company as compensation for dismantling the line for military purposes.

(*ii*) From 1929-30 the figures are included in the statistics of working of the North Western Railway (5′ 6″ gauge).

R & K. RAILWAY SYSTEM.

REFERENCES.

R & K. Railway. ---------- 3'-3⅜"

State lines. ----------

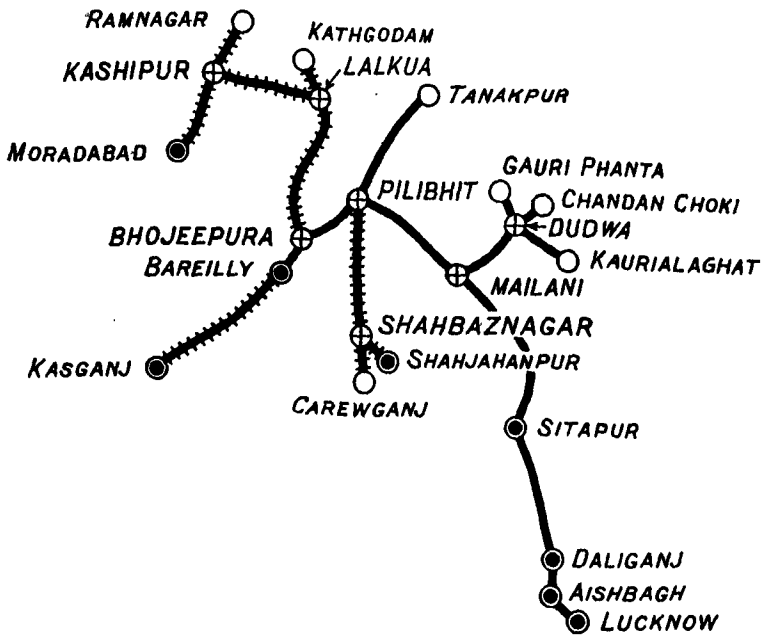
Home, Branch and Local line Junctions. ----------⊕---

Junctions connecting Foreign lines. ----------◉---

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.

N



13. ROHILKUND AND KUMAON RAILWAY SYSTEM.

Chairman and Managing Director.—Lt.-Col. T. Gracey, R.E.
Secretary.— Sir James Williamson.
Office.—237, Gresham House, Old Broad Street, London, E. C. 2.
Date of registration of the Company.—6th October 1882.

Lines comprised in the system—The Rohilkund and Kumaon railway system is made up of—

	Open line. Miles.
(*a*) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)	258·72
(*b*) Lucknow-Bareilly railway (3′ 3⅜″ gauge)	312·06
Total	570·78

Running powers—

Home line over foreign line—

Over Ramganga bridge, between Bareilly and Basharatganj, East Indian Railway, Oudh and Rohilkund Section.	for passenger and goods trains.	0·52
Over Ramganga bridge, between Dalpaspur and Moradabad, East Indian Railway, Oudh and Rohilkund Section.		0·40
		0·92

Foreign line over home line—

Bengal and North-Western railway, Daliganj to Aishbagh, for passenger and goods trains	3·40

(*a*) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5
Main line—				
Bhojeepura to Kathgodam	12-10-84	53·92	53·92	
Extensions—				
Kashganj extension—				
Bareilly to Soron	29-1-06	54·95		
Soron to Kashganj	4-1-85	9·00	63·95	
Ramnagar extension—				
Moradabad to Got	10-5-08	4·19		
Got to Kashipur	11-1-08	26·86		
Kashipur to Ramnagar	1-4-07	17·14	48·19	
Kashipur extension—				
Lalkua to Kashipur	15-12-07	36·00	36·00	
Shahjahanpur extension—				
Pilibhit to Bishalpur	24-2-11	23·14		
Bishalpur to Carewganj	13-1-12	31·12		
Shahbaznagar to Shahjahanpur	18-3-16	2·40	56·66	
Grand total	..	..	..	258·72

Details of construction—

Permanent-way.—The permanent-way consists of 41¼ and 50-lb. steel rails on sâl, and deodar sleepers. The lines from Lalkua to Ramnagar, Moradabad to Kashipur and Pilibhit to Carewganj are laid with 41¼-lb. steel rails on sâl and deodar sleepers.

Ballast.—The ballast consists of shingle.

Fencing.—The line is partially fenced.

Curves.—There are no curves with a radius of less than 716 feet.

Gradients.—The ruling gradient between Bhojeepura and Kathgodam is 1 in 280, except near the hills where it is 1 in 70; between Bareilly and Kashganj, 1 in 400; between Moradabad and Ramnagar, 1 in 400 except near the hills where it is 1 in 125; between Lalkua and Kashipur, 1 in 200, except for a short distance near Lalkua where it is 1 in 100; and between Pilibhit and Carewganj, 1 in 400.

Contracts—

Dated the 12th October 1882 (called the original contract), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the construction, maintenance, management and working of the railway from Bhojeepura to Kathgodam.

Dated the 8th September 1890 (called the principal contract), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the working of the Company's line and the construction, maintenance, management and working of certain State lines.

Dated the 31st December 1892 (supplemental to the contract of 1890 and called the capital advance contract), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, for the advance of capital for the State line and as to debentures.

Dated the 5th February 1901 (supplemental to the contracts of 1882, 1890 and 1892), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, prolonging and continuing the contract of 1890, subject to certain modifications thereof and of the contracts of 1882 and 1892.

13. ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

(*a*) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)—*contd.*

Contracts—*contd.*

Dated the 24th April 1903 (supplemental to the contracts of 1882 and 1890), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the " prescribed " rate of exchange. [Cancelled as from the 1st October 1921 by the contract of 23rd November 1923.]

Dated the 15th July 1904 (supplemental to the contracts of 1882, 1890, 1901 and 1903), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the construction, maintenance, management and working of certain Branch railways and the purchase of existing Branch lines.

Dated the 24th March 1909 (supplemental to, and in modification of, the contracts of 1882, 1890, 1892, 1901, 1903, 1904 and 1906), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the raising of capital for the purposes both of the Company's lines and of the Lucknow-Bareilly railway, and for the construction, maintenance, management and working of the Pilibhit-Barmdeo railway, extensions of the Dudhwa branch with a permanent bridge over the Sarda river, and the Pilibhit-Shahjahanpur railway.

Dated the 3rd July 1914 (supplemental to the contracts of 1882, 1890, 1892, 1901, 1903, 1904, 1906 and 1909), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, as to the adoption of the Government financial year for the preparation of the accounts.

Dated the 23rd November 1923 (supplemental to the above quoted contracts and contract dated 20th April 1931), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, regarding the addition to be made to the purchase price of the main line in the event of its being purchased in 1932, determination of the Powayan Steam Tramway contracts revision of the rates of exchange and repayment to the company of capital expenditure incurred by them for Lucknow-Bareilly railway and company's branch lines after 31st December 1912 otherwise than out of the proceeds of the issue of joint debenture stock. (Rate of exchange further revised, *vide* India Office letter No. F.-6622/28, dated 24th October 1928.)

Dated the 21st February 1929 (supplemental to the above contracts), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, regarding construction and working of the new extensions of the Railways now worked by the Rohilkund and Kumaon Railway Company.

Dated the 20th April 1931 (supplemental to the above contracts) *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, regarding rate of exchange with effect from 1st October 1928.

Dated the 8th December 1932 (supplemental to, and in modification of, the above noted contracts), *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, regarding the terms for extended option of purchase of the Rohilkund and Kumaon Railway.

Dated the 9th October 1936 (supplemental to the contracts of 1882 and 1890 and to all other contracts supplemental thereto) *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, regarding division of earnings and net earnings on the termination of contracts of 1882 and 1890.

Dated the 15th January 1937 (supplemental to the above noted contracts) *between the Secretary of State and the Rohilkund and Kumaon Railway Company*, in connection with the amount of rent payable by the Postal Department of the Government of India for buildings provided for their use by the Rohilkund and Kumaon Railway Company.

Main provisions of contracts—

(i) *Land.*—Land for the Company's railway constructed in pursuance of the original contract was provided by the Government free of cost to the Company, subject to the condition that the Company pays, on demand, to Government the cost price of land purchased by Government for the purposes of the Company's railway. Land for the railway from Gola Gokaran Nath to Pilibhit, and for all the other State lines provided by the Government after the 1st January 1891 is charged to capital subsequent to the date of the principal contract. Land for Branch railways and Branch line works is provided free, except and excluding land required for quarrying ballast, brick-fields or kindred purposes. Land for new extensions constructed or to be constructed between 1st April 1928 and 31st December 1932 will be provided free of cost to the Company and all the provisions regarding land for main line, State railways or the Branch lines apply as well to the land supplied for new extensions referred to above.

(ii) *Government aid.*—Government guaranteed interest at 4 per cent. per annum in sterling on the capital up to £200,000 expended on the *Company's* original railway until its opening throughout for public traffic but for no longer than and including 1st January 1885; thereafter a subsidy of Rs. 20,000 half-yearly for ten years from the date of opening, which ceased on the 31st December 1894.

In the case of the *Lucknow-Bareilly* railway the Government guaranteed the principal and interest in respect of debentures for the nominal amount of £147,000 issued by the Company in order to raise the sum of £160,000 (the sum actually realised being £160,837).

NOTE.—These debentures were paid off from advances by the Secretary of State in England as follows:—

£40,000 on 1st July 1911.
£32,000 on 1st July 1915.
£75,000 on 1st July 1918

13. ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

(a) **Rohilkund and Kumaon railway** (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*contd.*

The Company reimburses the Government any amount by which the interest payable under the guarantee may exceed Rs. 96,000 in any one year.

The capital expenditure on L. B. railway was until 1909 met by the State. Thereafter under the contract of 1909 funds for capital works on both the Company's and State Section were raised by the Company in the Shape of Debentures on the Joint Security of the interests of both in the system. The State portion of this Joint Debenture Stock having proved insufficient the Secretary of State made an advance of £146,000 in 1923 and it has since been arranged (*vide* India Office letter No. F. 7899/29, dated 7th January 1930) that the capital open line expenditure on the Lucknow-Bareilly railway will, with effect from 1st October 1929, be financed by the Secretary of State in India and England respectively.

All sums advanced by the Government after the 31st December 1900 bear interest at the rate of 3½ per cent. per annum, except the sum of £146,000 advanced by the Secretary of State in 1923 and the amount of Rs. 40,802 expended by the Company on open line capital works from 1st October 1929 to 31st December 1929 and repaid by Government which bear interest at 5½ per cent. The amounts advanced on and from 1st January 1930 will bear interest at 6 per cent. per annum (*vide* India Office letter No. F. 1650/30 of 17th March 1930), and those advanced since 1st April 1933 bear interest at 4½ per cent. per annum (*vide* India Office letter No. F. 3680, dated the 29th June 1933).

All moneys required for the construction and equipment with rolling stock, plant and machinery of new extensions constructed or to be constructed between 1st April 1928 and 31st December 1932 are payable by the Secretary of State. A separate capital account is to be maintained for it.

(iii) *Terms of working.*—The Lucknow-Bareilly railway is worked in conjunction with the Company's own line, a joint account of working expenses being kept. Joint working expenses account includes—

(1) any item of capital expenditure not exceeding Rs. 1,000 classed as "minor work" subject to a maximum charge on such account of Rs. 15 per mile of railway open per half-year; and

(2) a payment to Government of Rs. 20 per mile of railway open to traffic per half-year for audit and supervision.

The joint working expenses of the open system are divided between—

(*a*) the Company's original line and "the Additional Main Line Works,"

(*b*) the Lucknow-Bareilly railway and "the State Line Works," and

(*c*) "the Branch Railways" and "the Branch Line Works,"

(*d*) the new extensions constructed or to be constructed between 1st April 1928 and 31st December 1932,

in proportion to the respective gross earnings of those three classes.

(iv) *Distribution of profits.*—The earnings of the Company's original line and "the Additional Main Line Works" after payment of all working expenses, are applied in the following order:—

(*a*) in payment of contribution to Provident Fund,

(*b*) in payment of interest on the Company's Main Line Stock (being part of the Joint Debenture Stock),

(*c*) in payment of interest on borrowed capital, and

(*d*) in payment of interest at 6 per cent. per annum on the *bonâ fide* paid up share capital of the Company.

The surplus is divided equally between the Government and the Company.

The net earnings of "the Branch Railways" and of "the Branch Line Works" belong absolutely to the Company, without any right of the Secretary of State to participate therein, subject only to the payment thereout of contribution to Provident Fund and interest on the Company's Branch Line Stock (being part of the Joint Debenture Stock).

The net earnings of the Lucknow-Bareilly railway and "the State Works", *i.e.*, of the undertaking are applied in the following order:—

(*a*) in payment of contribution to Provident Fund,

(*b*) in payment of the interest at 4 per cent. per annum on the State Stock (being part of the Joint Debenture Stock), except interest on such portion of the State Stock as may for the time being be appropriated for lines under construction, which latter is charged to capital till the close of the half year next after the opening of lines to traffic,

(*c*) in payment of the interest on the debentures of £147,000 issued by the Company in 1890 and of interest at 4 per cent. per annum on any further capital supplied by the Company or advanced by the Government for the purposes of the undertaking (3½ per cent. per annum on Government advances subsequent to the 31st December 1900),

(*d*) in payment to the Government of interest at 4 per cent. per annum on the value at cost price of the railways, rolling stock plant, machinery and land handed over to or retained by the Company on the 1st January 1891 (standing to debit of Part I of the Capital Account), and

13. ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

(a) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*contd.*

(e) the residue is divided between the Government and the Company in the ratio of their respective shares of capital in the undertaking.

[*Note 1.*—The State Stock (part of Joint Debenture Stock), excluding and except so much of it as is appropriated or the construction of the Pilibhit-Barmdeo railway, does not participate in profits either as Government capital or as Company's capital.]

[*Note 2.*—The amount advanced by the Secretary of State to pay off debentures for £147,000, *vide* (ii) above and note in connection therewith does not affect the capital of either the Secretary of State or the Company for the purposes of division of surplus profits of the Lucknow-Bareilly railway.]

The net earnings of the new extensions constructed or to be constructed between 1st April 1928 and 31st December 1932 belong wholly to the Secretary of State.

(v) *Rates and fares*—

Maxima :—

Passengers :—

1st class, 3 annas per mile.
Lower class, 4½ pies per mile.
Luggage, 2 pies per maund per mile.

Company's lines :—

Goods :—

Edible grains, ⅓rd pie per maund per mile.

[*Note.*—In Railway Board's letter No. 842-T.-16, dated the 25th May 1923, 0·38 pie per maund per mile was sanctioned as the maximum rate.]

Other goods, 2 pies per maund per mile.
Parcels and live stock at rate not exceeding 50 per cent. over rates on the East Indian railway.

On the Branch railways food grains and salt are to be carried at rates, not less than the minimum for goods, as the Government may fix; and fuel for distances exceeding 100 miles on the Branch railways, or on any part thereof together with any part of the other railways belonging to or worked by the Company at a rate not exceeding ⅛th pie per maund per mile.

Ducknow-Bareilly railway and branches:—

The Government to authorise, from time to time, maximum and minimum rates, and to prescribe the classification of passengers and goods, as well as the extent to which within the maxima and minima, the Company may vary such rates.

For traffic between the joint line (Bareilly-Bhojeepura) and the Company's own line, the rates in force on the latter may be levied, except in the case of food grains and salt, and of fuel carried for distances exceeding 100 miles; for the former the rates will not be less than the minimum for goods fixed by Government, and for the latter the rates will not exceed ⅛th pie per maund per mile.

(vi) *Special obligations as to the conveyance of*—

(a) Mails.—On the Company's original line, to be conveyed on payment of Rs. 5,000 half-yearly.

On the extensions of the Company's original line (Additional Main Line Works), the Company is to receive a reasonable remuneration in lieu of the sum of Rs. 5,000 above noted.

On the Lucknow-Bareilly railway and branches, on the same general conditions as are for the time being in force on other 3′ 3⅜″ gauge State railways, and at rates to be approved by the Government

(b) Troops, police, high Government officials and Government stores.—

On the Company's lines, at the ordinary tariff rates charged to the public.

On the Lucknow-Bareilly railway and branches, on the same general conditions as are for the time being in force on other 3′ 3⅜″ gauge State railways, and at rates to be approved by the Government.

(c) Government bullion and coin, and the persons in charge thereof—

On the Company's lines at special rates to be from time to time agreed upon between the Government and the Company.

On the Lucknow-Bareilly railway and branches, at special rates to be approved by the Government.

13. ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

(a) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*contd.*

(vii) *Power of the Government to determine contract—*

Contract of 1882 : The Government may terminate the contract at the end of the 50th year, *i.e.*, on the 31st December 1932, by giving 12 months' notice. If the contract terminate by such notice, or by the efflux of time, the Government are to pay to the Company 25 times the average net earnings less the Government share of surplus profits, during the 5 years immediately preceding either the date of the termination or (at the option of the Government) the 31st December 1912.

Note.—(1) The cost of making good any shortcomings which render the value of the line not commensurate with the capital expended may be deducted from the purchase price payable.

(2) On the determination of the existing contracts, whether in 1932 or 1981, an addition shall be made to the purchase price of the Company's main line, as determined by the contracts, of the equivalent of the amount by which the open line capital expenditure incurred between the 1st January 1913 and the 31st December 1932 shall exceed Rs. 2,00,000 (Secretary of State's Despatch No. 36-Ry., dated the 22nd December 1921).

The Government may also determine the contract at any time on 6 months' notice (called the " Notice of Determination ") if the Company fail to observe its obligations, on payment of the value of the permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment, in which latter case the Company must remove its property within 9 months from the termination of the contract, otherwise it becomes the property of the Government.

Contract of 1890 : If the original contract with the Company, dated the 12th October 1882 terminate for any reason, then the contract for the working of the Lucknow-Bareilly railway *ipso facto* terminates at the same time. The Government may terminate the contract on the 31st December 1932, or on the 31st December in any subsequent year, by giving 12 months' notice [but see page 189 under 4 (*ii*)]. The Government may also determine the contract on 6 months' notice (called the " Notice of Determination ") if the Company fail to observe its obligations.

On the determination of the contract the Government will resume possession of the State railway, and at their option will either repay the capital that has been received from the Company for the purposes of the undertaking, or will take over the liability of the Company in respect of such capital. If the capital is repaid, the payment may, at the option of the Government, be made either in England or in India.

Contract of 1904 : If the original contract with the Company, dated the 12th October 1882, terminate either by " Notice of Purchase " or by the efflux of time, then the contract of 1904 terminates at the same time, in which case the Government are to pay to the Company 25 times the average net earnings of the Lalkua-Kashipur-Moradabad-Ramnagar branches during the 5 years immediately preceding the termination, provided such sum does not exceed by more than 20 per cent., nor be less than, the capital expenditure on those railways.

[*Note 1.*—The word " the capital expenditure on those railways " as used above refer to the capital expenditure in rupees as shown in the capital account of the company in India after all such expenditure incurred in England has been incorporated therein as provided by the terms of clause 30 of 1904 contract as modified from time to time.]

[*Note 2.*—The cost of making good any shortcomings which render the value of the line not commensurate with the capital expended may be deducted from the purchase price payable.]

The Government may also determine the contract at any time on 6 months' notice (called the " Notice of Determination ") if the Company fail to observe its obligations, on payment of the value of the permanent-way, stock and plant, or may call upon the Company to accept the same in lieu of payment, in which latter case the Company must remove its property within 9 months from the termination of the contract, otherwise it becomes the property of the Government.

Contract of 1909 : By clause 18 of the contract of the 24th March 1909, if either the contract of 1890 be determined for any cause or that of 1909 so far as it relates to " the State lines " be determined by " Notice of Determination ", then the other of the two contracts *ipso facto* terminates at the same time.

By clause 19 of the contract of the 24th March 1909, that contract so far as it relates to " the Scheduled Company's Works " (the Pilibhit-Shahjahanpur line), in common with the contract of 1904, terminates *ipso facto* with the determination by " Notice of Purchase " of the Company's original contract of the 12th October 1882, the Government, however, only having the power to purchase " the Company's original line ", " the Branch railways " and " the Scheduled Company's Works " collectively, not any of them separately from the other or others of them.

By clause 20 of the contract of the 24th March 1909—

(*a*) the contract of 1909 so far as relates to " the Additional Main Line Works " terminates *ipso facto* with the determination by " Notice of Determination " of the Company's original coutract of the 12th October 1882,

(*b*) the contract of 1909 so far as it relates to " the Branch Line Works " terminates *ipso facto* with the determination by " Notice of Determination " of the contract of 1904, except as noted above against clauses 18 and 20 of the contract of 1909 and also except as provided for in clause 77 of the contract of 1890, the several powers of the Government to determine by

13. ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

(*a*) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*contd.*

"Notice of Determination" the contracts respectively of 1882, 1890 and 1904, and also that of 1909 so far as they relate to "the State Line Works" to "the Additional Main Line Works" and to "the Branch Line Works", remain separate and unaffected, and are exercisable as to any one or parts thereof independently and without prejudice as to the continuance of the others or part thereof, in the event of the Company failing to observe its obligations contained in the contract or part of the contract which it is sought to determine : provided that the powers of the Government to determine, by "Notice of Determination", the contract of 1909 so far as it relates to "the Additional Main Line Works" and to "the Branch Line Works" are exercisable separately in respect of any line or branch forming an independent part of such works, if the Company fail to observe its obligations in regard thereto.

Upon the determination of the contract of 1904 or of 1909 so far as it relates to any of the Branch Lines or Branch Line Works referred to therein the Secretary of State will repay to the Company all moneys provided by the Company for Capital expenditure on the Branch Line or Works after 31st December 1912 otherwise than out of the proceeds of the Joint Debenture Stock under the contract of 1909.

Contract of 1929.—The Contract terminates as to all or any of the extensions constructed thereunder on 31st December 1932 or on the same day in any subsequent year by at least six calendar months' notice being given by either party. Upon the determination of this contract, the company shall give to the Secretary of State possession of all or any of the extensions as aforesaid with all buildings erected on such extension or anywise belonging thereto and shall also deliver to the Secretary of State all rolling stock, movable machinery or other property belonging or appro priated to such extension.

Contract of 1932.—(1) The Secretary of State shall have the option of purchasing the company's railway on the 31st December 1937 or the 31st December 1942 on giving to the Company 12 months' previous notice in writing of this intention in that behalf.

Clauses 3 and 4 of the deed of 1932.

If the option to purchase the Company's railways in either of the year 1937 or 1942 is exercised the price payable is to be :—

(*a*) In respect of the Company's original line the equivalent in sterling of the sum of 64,00,000 rupees (Reduced by Rs. 1,400 in respect of the adjustments of railway police charges for the years 1907-12) calculated at 1*s.* 6*d.* the rupee it being understood that no variation in this rate shall be admissible.

(*b*) In respect of the extensions a sum equal to twenty-five times the average yearly net earnings of the lines during the five years ending on the 31st December 1932 subject to a maximum payment of the capital expenditure incurred on such lines up to that date with the sanction of the Secretary of State plus a premium of 20 per cent. and a minimum payment of the capital expenditure so incurred such sums being calculated in the manner prescribed in clause 57 of the Deed of the 15th July 1904 as construed in the award of Sir George Stapylton Barnes dated the 19th day of May 1930 and being convertible at the fixed rate of 1*s.* 6*d.* the rupee and no variation of this rate being admissible.

(*c*) A sum equal to the amount by which the capital expenditure incurred on the original line with the sanction of the Secretary of State between the end of year 1912 and the end of year 1932 shall exceed 2,00,000 rupees, such sum to be converted from rupees into sterling at the fixed rate of 1*s.* 6*d.* the rupee.

NOTE—1. The aggregate of the sums mentioned in sub-clauses (*a*), (*b*) and (*c*) will be subject to the deductions referred to in clause 28 of the Deed of the 24th day of March 1909 and clause 14 of the deed of the 23rd day of November 1923 with regard to the purchase or other moneys mentioned in the same clauses.

NOTE—2. The Railway Police charges for the years 1907—12, amounting to Rs. 1,400 referred to in clause 3 (a) above were adjusted in the accounts for March 1935.

4. In the event of the Secretary of State exercising his option of purchase either in the year 1937 or in the year 1942 he will repay to the company in addition the actual capital expenditure in sterling incurred by the company with his sanction both on the original line and on the extensions between the year 1932 and the year 1937 or 1942 as the case may be so far as such moneys shall not have been provided or repaid out of the proceeds of issues of Joint Debenture Stock under the contract of the 24th day of March 1909.

(*i*) From 1st day of February 1933 ; the company's share of the residue of net earnings as calculated under the provisions of the relevant principal deeds payable to the company for such working shall be reduced

13. ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

(*a*) Rohilkund and Kumaon railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of contracts—*concld.*

by 10 per cent. but otherwise such working shall be on the same terms as under the principal Deeds relating thereto.

(*ii*) The company shall continue the working of the State railways until the end of the year 1937 or if the Company's Railways be not purchased in the year 1937, until the end of the year 1942, but the company shall have no power to continue the working of the State Railways after the end of the year 1942 unless a further agreement in relation thereto is come to by the parties concerned.

(viii) *Power of the Company to surrender contract*—Nil.

(ix) *Term of contract.*—Those of 1882, 1904 and 1909, up to the 31st December 1981; those of 1890 and 1929 up to the 31st December 1937, or if the Company's railways are not purchased in 1937, up to 31st December 1942.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Share of net earnings paid over to the Secy. of State.	Earnings per mile per week	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	
1884 . .	55·00	19,40,266	36,543	1,733	0·09	..	51	95·26	Net earnings from 1880 to 1894 include annual subsidy of Rs. 40,000.
1885 . .	55·00	21,71,124	2,38,572	80,153	3·69	..	68	66·40	
1886 . .	55·00	22,52,962	3,00,191	1,23,832	5·50	..	86	58·75	
1887 . .	55·00	22,91,619	3,19,274	1,16,800	5·10	..	92	63·42	
1888 . .	55·00	23,40,100	3,34,092	1,42,120	6·07	..	96	57·46	
1889 . .	55·00	23,96,624	3,72,270	1,60,135	6·68	4,419	107	56·98	
1890 . .	55·00	24,17,052	3,14,834	1,51,003	6·25	7,954	90	52·04	
1891 . .	53·92	20,49,458	3,85,084	1,60,081	7·81	1,286	112	58·43	
1892 . .	53·92	20,58,575	4,33,648	1,97,780	9·61	15,651	127	54·39	
1893 . .	53·92	20,82,280	4,25,909	1,83,180	8·80	6,669	124	56·99	
1894 . .	53·92	20,80,440	4,59,313	2,15,191	10·34	13,269	134	53·15	
1895 . .	53·92	20,78,251	4,04,504	1,52,209	7·32	..	118	62·37	
1896 . .	53·92	20,79,863	4,26,905	1,53,821	7·40	..	125	63·96	
1897 . .	53·92	21,20,428	4,23,720	1,72,319	8·13	4,450	124	59·83	
1898 . .	53·92	21,42,552	4,62,308	2,20,785	10·30	15,284	135	52·24	
1899 . .	53·92	21,48,313	4,65,623	2,24,020	10·89	23,900	136	49·74	
1900 . .	53·92	21,53,125	4,37,572	2,28,048	10·59	20,439	128	47·88	
1901 . .	53·92	22,09,423	3,84,314	2,09,896	9·50	14,769	112	45·38	
1902 . .	53·92	23,36,911	4,10,626	2,18,317	9·34	18,356	120	46·83	
1903 . .	53·92	25,89,790	4,13,147	2,30,405	8·51	26,268	121	46·65	
1904 . .	53·92	43,55,575	4,18,787	2,24,403	5·15	26,981	122	46·41	
1905 . .	53·92	93,34,589	4,40,664	1,54,126	1·65	..	129	65·02	The decrease in net earnings of 1905 is due to the heavy outlay on relaying the main line.
1906 . .	117·87	1,16,53,319	8,03,607	3,65,161	3·13	2,846	124	54·56	
1907 . .	117·87	1,28,55,065	10,67,928	5,69,506	4·43	52,081	158	46·67	
1908 . .	203·35	1,35,79,271	11,44,078	5,50,193	4·05	25,574	102	51·91	
1909 . .	202·06	1,36,93,877	12,70,929	6,26,391	4·57	29,309	121	50·71	
1910 . .	202·06	1,52,28,920	13,46,150	7,62,425	5·00	53,136	128	43·36	
1911 . .	225·20	1,59,24,548	14,73,586	7,99,809	5·02	50,891	128	45·72	
1912 . .	256·32	1,62,89,858	18,99,670	11,51,734	7·07	93,557	144	39·37	
1st qr. of 1913	256·32	1,63,05,789	4,88,833	2,99,341	1·84	17,526	37	38·76	
1913-14 .	256·32	1,67,73,664	18,84,583	10,57,658	6·30	73,454	141	43·88	
1914-15 .	256·32	1,69,38,847	5,58,479	7,39,623	4·37	25,718	117	52 54	
1915-16 .	258·84	1,69,99,623	17,25,863	9,13,086	5·37	45,669	128	47·09	
1916-17 .	258·72	1,69,41,247	18,90,918	11,11,676	6·56	85,833	141	41·20	
1917-18 .	258·72	1,68,16,023	21,68,562	12,19,547	7·25	1,09,698	161	43·76	
1918-19 .	258·72	1,66,59,332	24,16,332	12,15,264	7·29	1,03,184	180	49·72	
1919-20 .	258·72	1,67,51,918	23,31,054	10,56,360	6·31	95,605	173	54·68	
1920-21 .	258·72	1,72,26,110	24,38,013	11,42,909	6·63	1,71,677	181	53·12	
1921-22 .	258·72	1,74,89,716	27,24,189	12,68,070	7·25	2,23,292	202	53·45	
1922-23 .	258·72	1,78,49,876	29,37,107	13,19,009	7·39	1,12,092	218	55·09	
1923-24 .	258·72	1,82,72,461	28,04,863	12,76,854	6·99	84,126	208	54·48	
1924-25 .	258·72	1,84,92,954	30,00,236	14,99,508	8·11	1,10,047	223	50 02	
1925-26 .	258·72	1,87,03,354	29,82,914	14,80,634	7·92	1,21,291	222	50·36	
1926-27 .	258·72	1,88,30,315	28,35,836	14,26,701	7·58	1,39,110	211	49·69	
1927-28 .	258·72	1,89,42,243	29,62,893	14,91,165	7·87	1,31,500	220	49·67	
1928-29 .	258·72	1,91,23,214	30,67,471	15,68,530	8·20	1,46,978	228	48·83	
1929-30 .	258·72	1,94,55,094	28,73,346	13,96,911	7·18	1,45,987	214	51·38	
1930-31 .	258·72	1,96,24,841	29,28,808	13,99,346	7·13	93,076	218	52·22	
1931-32 .	258·72	1,97,76,569	27,24,873	13,12,199	6·64	88,405	202	51·84	
1932-33	258·72	1,98,02,484	28,05,775	14,84,902	7·50	70,460	209	47·08	
1933-34 .	258·72	1,98,12,212	30,49,890	15,70,642	7·93	1,02,071	227	48·50	
1934-35 .	258·72	2,02,53,105	32,49,077	17,50,456	8·64	1,29,202	242	46·12	
1935-36 .	258·72	2,05,18,958	32,50,349	17,49,295	8·53	1,39,575	242	46·18	
1936-37 .	258·72	2,06,49,047	34,79,627	20,09,006	9·73	1,36,390	259	42·26	
1937-38 .	258·72	2,07,84,477	33,52,465	17,45,681	8·40	1,73,682	249	47·93	
1938-39 .	258·72	2,08,47,467	33,84,890	14,83,649	7·12	1,22,703	252	56·17	

13. ROHILKUND AND KUMAON RAILWAY SYSTEM—*contd.*

(b) Lucknow-Bareilly railway (3′ 3⅜″ gauge)—

A 2′ 6″ gauge light railway of 36·86 miles, from Shahjahanpur *via* Powayan to Mailani, which was constructed by a subsidized company and maintained and worked as part of the system since 17th December 1900, was dismantled during the war and acquired by the State in 1920-21.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Lucknow to Sitapur	15-11-86	55·00		
Sitapur to Lakhimpur	15-4-87	28·50		
Lakhimpur to Gola Gokaran Nath	15-12-87	21·50		
Gola Gokaran Nath to Pilibhit	1-4-91	57·55		
Pilibhit to Bhojeepura	15-11-84	24·00		
Bhojeepura to Bareilly	12-10-84	12·00		
			198·55	
Branches and extensions—				
Bareilly grain siding	1-4-94	1·76		
			1·75	
Kaurialaghat extension—				
Mailani to Sarda	1-1-93			
Sarda to Sohela	10-3-93	30·78		
Sohela to Sonaripur	18-3-94			
Sonaripur to Kaurialaghat	2-1-11	19·49		
			50·27	
Chandan Choki extension—				
Dudhwa to Chandan Choki	1-4-03	7·57		
			7·57	
Gauri Phanta extension—				
Dudhwa to Gauri Phanta	15-4-14	14·49		
			14·49	
Barmdeo extension—				
Pilibhit to Barmdeo	15-5 12	38·53		
			38·53	
Total open mileage	..	..	..	311·16
Double line—				
Lucknow City to Aishbagh	31-10-25	1·16	1·16	

Details of construction—

Permanent-way.—The permanent-way consists of 41½-lb. and 50-lb. steel rails on sal sleepers.

Ballast.—The ballast consists of broken brick, kunkur and shingle.

Fencing.—The line is partially fenced.

Curves.—There is only one curve with a radius of less than 1,000 feet.

Gradients.—The ruling gradient between Lucknow and Bareilly is 1 in 500, except near Lucknow and Bareilly, where it is 1 in 200; between Mailani and Kaurialaghat, 1 in 400 and between Dudhwa and Chandan Choki, 1 in 100.

Contracts—
Main Provisions of contracts— As noted under Rohilkund and Kumaon railway (3′ 3⅜′ gauge)

3. ROHILKUND AND KUMAON RAILWAY SYSTEM—*concld.*

(b) Lucknow-Bareilly railway (3′ 3⅜″ gauge)—*contd.*

Statistics of working. (Those for the periods prior to 1891 will be found in Appendix 38 to the Railway Administration Report for 1907)

NOTE.—From the year 1936-37 the $\frac{\text{working expenses}}{\text{net earnings}}$ have been arrived at after taking into account the Appropriation to Depreciation Reserve Fund instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction. *	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) *attributable to each year.*	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1891 .	198·38	79,17,846	4,95,068	1,72,145	2·17	2,72,055	..	—99,910	56	65·23
1892 .	198·33	81,66,804	6,82,836	2,74,691	3·36	3,07,651	10,636	—43,686	66	59·79
1893 .	222·05	83,89,362	7,28,878	2,73,541	3·26	3,26,770	3,495	—56,724	67	62·47
1894 .	231·17	85,93,158	9,72,269	3,94,240	4·59	3,45,323	24,180	+24,737	88	59·45
1895 .	231·17	87,22,466	8,25,934	3,13,116	3·59	3,56,556	15,834	—59,314	74	62·09
1896 .	231·17	89,63,620	8,27,599	3,02,071	3·37	3,48,885	13,415	—60,229	75	63·50
1897 .	231·17	93,02,715	8,27,371	3,35,776	3·61	3,61,550	11,570	—37,344	75	59·43
1898 .	231·17	94,90,476	10,34,088	5,00,200	5·27	3,64,852	68,058	+67,290	94	51·61
1899 .	231·17	94,97,485	12,72,160	6,33,355	6·67	3,65,537	1,25,640	+1,42,178	114	50·20
1900 .	231·17	99,21,432	12,53,801	6,51,957	6·57	3,73,097	1,34,915	+1,43,945	107	48·02
1901 .	231·17	1,01,83,243	13,72,520	7,58,124	7·44	3,91,796	75,969	+2,90,559	123	44·76
1902 .	231·17	1,12,96,019	14,53,329	7,69,568	6·81	4,23,528	67,704	+2,78,336	132	47·05
1903 .	237·04	1,15,01,911	14,03,266	7,48,689	6·51	4,53,825	53,222	+2,41,642	126	46·65
1904 .	237·04	1,17,14,505	14,96,120	7,97,671	6·81	4,48,328	61,426	+2,87,917	133	46·68
1905 .	237·04	1,17,99,857	15,47,488	8,20,992	6·96	4,56,448	65,048	+3,05,496	138	46·95
1906 .	237·04	1,20,99,658	16,55,250	8,36,782	6·97	4,57,588	65,253	+3,13,942	148	49·46
1907 .	237·04	1,24,59,395	16,97,182	9,07,863	7·29	4,18,611	73,229	+4,16,023	150	46·56
1908 .	237·04	1,27,50,545	16,15,542	7,80,747	6·12	4,50,365	48,511	+2,81,871	131	51·67
1909 .	237·04	1,43,82,316	17,17,491	7,84,749	5·46	4,11,131	44,700	+3,28,918	159	54·31
1910 .	237·04	1,60,60,757	18,25,185	10,15,746	6·32	4,75,558	80,364	+4,59,824	148	46·38
1911 .	257·57	1,72,02,079	19,40,488	10,44,604	6·07	5,07,263	74,720	+4,62,621	152	46·17
1912 .	296·32	1,83,53,912	22,67,846	13,67,532	7·45	5,66,069	1,21,033	+6,80,430	157	39·70
1st qr. of 1913.	296·32	1,87,59,973	6,65,878	4,06,068	2·16	1,65,812	32,297	+2,07,899	42	39·03
1913-14	298·02	1,91,90,007	22,50,319	12,45,837	6·49	6,84,031	74,936	+4,86,870	148	44·64
1914-15	312·51	2,02,30,297	19,40,656	8,79,923	4·35	7,07,593	19,655	+1,52,675	119	54·66
1915-16	312·51	2,00,77,006	20,17,355	10,15,377	5·05	7,39,732	34,141	+2,41,504	124	49·09
1916-17	312·51	1,98,31,693	23,98,560	13,90,059	7·01	7,21,831	87,524	+5,80,704	148	42·45
1917-18	312·43	1,98,54,296	27,04,857	15,02,723	7·57	7,31,984	1,03,262	+6,67,477	166	44·76
1918-19	312·43	2,00,25,744	31,85,922	15,64,314	7·81	7,47,338	1,10,641	+7,06,335	196	50·66
1919-20	312·43	2,13,44,646	29,31,499	13,15,519	6·16	6,72,194	78,321	+5,65,004	178	55·12
1920-21	316·34	2,22,08,000	29,79,578	13,81,725	6·22	7,22,838	87,513	+5,71,374	181	53·63
1921-22	316·19	2,25,41,293	35,14,645	16,10,982	7·15	8,67,876	92,302	+6,50,804	214	54·16
1922-23	316·19	2,30,35,670	37,15,308	16,58,177	7·20	9,58,533	94,330	+6,05,314	226	55·37
1923-24	316·19	2,32,55,161	35,76,471	16,26,655	6·99	9,12,888	91,591	+6,22,176	218	54·52
1924-25	312·65	2,34,77,911	36,94,959	18,35,598	7·82	8,93,125	1,22,483	+8,19,990	227	50·32
1925-26	312·06	2,34,50,951	38,10,875	19,04,018	8·12	8,94,856	1,33,968	+8,75,194	235	50·04
1926-27	312·06	2,37,08,597	37,78,491	19,26,144	8·12	9,01,041	1,36,162	+8,88,941	233	49·02
1927-28	312·06	2,39,14,110	42,47,739	21,54,217	9·01	9,05,978	1,66,412	+10,81,827	262	49·29
1928-29	312·06	2,41,89,490	37,48,865	19,09,464	7·89	9,22,264	1,32,281	+7,89,983	231	49·07
1929-30	312·06	2,42,57,442	36,09,699	17,67,972	7·29	9,22,741	1,12,638	+8,10,103	222	51·02
1930-31	312·06	2,43,24,812	36,28,011	17,16,214	7·06	9,39,246	1,06,184	+6,70,784	224	52·70
1931-32	312·06	2,44,54,095	34,57,524	16,43,456	6·72	9,56,304	96,062	+5,91,090	213	52·47
1932-33	312·06	2,45,69,423	35,70,486	18,78,846	7·65	9,50,443	1,18,784	+8,09,619	220	47·38
1933-34	312·06	2,46,48,299	36,88,115	19,80,102	8·03	9,44,592	1,17,267	+9,18,243	227	46·31
1934-35	312·06	2,48,30,844	(*a*)36,37,127	(*a*)19,03,225	7·66	9,40,090	1,20,987	(*a*)+8,33,148	224	47·67
1935-36	312·06	2,51,49,677	37,86,371	21,24,088	8·45	9,39,974	1,33,366	+10,50,748	233	43·90
1936-37	311·16	2,54,43,167	40,36,798	20,56,281	8·08	9,34,149	1,68,918	+9,53,214	249	49·06
1937-38	311·16	2,57,13,625	41,65,644	20,03,304	7·79	(*b*)9,43,600	1,46,972	+9,12,732	257	51·91
1938-39	311·16	2,63,40,815	40,70,894	18,66,423	7·09	9,59,825	94,819	+8,11,779	252	54·15

* From 1909 the figures in this column include outlay incurred from Joint Debenture Stock Funds.

(*a*) Excludes Rs. 93,739 on account of claim in connection with hire charges, etc., re-transferred from balance of "Net revenue" as per C.R.A.'s No. 130 Accts./33-34 dated the 20th July 1935.

(*b*) Includes Rs. 72,011 representing the accrued interest for the year 1937-38.

14. SOUTH INDIAN RAILWAY SYSTEM.

Chairman and Managing Director.—Sir Ernest A. S. Bell, C.I.E.
Office.—91, Petty France, The White Mansion, S. W. 1.
Date of registration of the Company.—1890.

The lines formerly owned and worked by the Great Southern India and the Carnatic Railway Companies were amalgamated on the 1st July 1874, under the title of the South Indian Railway which on the 1st January 1891 was purchased by the State and handed over, together with the Villupuram-Guntakal State railway, for working as one undertaking, to a new company—the existing South Indian Railway Company. The portion of the railway from Dharmavaram to Guntakal was made over to the former Southern Mahratta railway in 1893.

With effect from the 1st January 1908 the Jalarpet-Mangalore section of the former Madras railway including the Tirupattur-Krishnagiri, Morappur-Dharmapuri and the Nilgiri railways was incorporated in the undertaking of the South Indian Railway Company, who, from the same date, relinquished and made over to the amalgamated Madras and Southern Mahratta Railway Company the 3′ 3⅜″ gauge lines from Katpadi to Dharmavaram and from Pakala to Gudur, and obtained running powers over the Madras-Bangalore section of the Madras and Southern Mahratta railway. The Shoranur-Cochin Indian State line was, on the same date, also transferred from the former Madras Railway Company to the South Indian Railway Company for working.

Lines comprised in the system.—The South Indian railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total
	Miles.	Miles.	Miles.
(*a*) South Indian railway (5′ 6″ gauge)	599·13	..	599·13
(*b*) Shoranur-Cochin railway (5′ 6″ gauge)*	65·01	4·31	69·32
(*c*) South Indian railway (3′ 3⅜″ gauge)	1,506·27	..	1,506·27
(*d*) Nilgiri railway (3′ 3⅜″ gauge)	28·96	..	28·96
(*e*) Peralam-Karaikkal railway (3′ 3⅜″ gauge)	14·65	..	14·65
(*f*) Podanur-Pollachi railway (3′ 3⅜″ gauge)	25·04	..	25·04
(*g*) Pondicherry railway (3′ 3⅜″ gauge)	7·85	..	7·85
(*h*) Tinnevelly-Tiruchendur railway (3′ 3⅜″ gauge)	38·18	..	38·18
(*i*) Travancore railway (British section) (3′ 3⅜″ gauge)	50·33	..	50·33
(*j*) Travancore railway (Indian State section) (3′ 3⅜″ gauge)	97·64	..	97·64
(*k*) Morapur-Hosur railway (2′ 6″ gauge)	73·31	..	73·31
(*l*) Tirupattur-Krishnagiri railway (2′ 6″ gauge)	25·38	..	25·38
Total	2,531·75	4·31	2,536·06

Running powers—

Home line over foreign line—

Madras to Bangalore, Madras and Southern Mahratta railway for passenger and goods trains. 219·00

(a) South Indian Railway (5′ 6″ gauge)—

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand Total. 5
Main line—				
West outer signal at Jalarpet to Tirupattur	23-5-60	4·65		
Tirupattur to Salem	1-2-61	69·98		
Salem to Sankaridrug	1-12-61	23·68		
Sankaridrug to Podanur	12-5-62	71·24		
Podanur to Pattambi	14-4-62	64·96		
Pattambi to Kuttipuram	23-9-61	11·52		
Kuttipuram to Tirur	1-5-61	9·39		
Tirur to Kadalundi	12-3-61	16·31		
Kadalundi to Calicut	2-1-88	9·21		
Calicut to Badagara	1-10-01	28·95		
Badagara to Tillicherry	1-5-02	13·50		
Tellicherry to Cannanore	20-5-03	13·00		
Cannanore to Azihkal	15-3-04	4·10		
Azihkal to Kanhangod	21-8-06	34·52		
Kanhangod to Kasaragod	1-10-06	14·22		
Kasaragod to Kumbla	17-11-06	7·62		
Kumbla to Mangalore	3-7-07	20·91		
Mettupalaiyam branch—			417·76	
Podanur to Coimbatore	1-2-73	3·78		
Coimbatore to Mettupalaiyam	31-8-73	21·97		
Palghat branch—			25·75	
Olavakkot to Palghat‡	2-1-88	2·40		
Nilambur Branch—			2·40	
Shoranur to Angadipuram	3-2-27	17·39		
Angadipuram to Vaniyambalam	3-8-27	17·06		
Vaniyambalam to Nilambur Road	26-10-27	6·92		
			41·37	
Salem to Mettur Dam (including the mileage of assisting siding from Mechori Road to Mettur Dam).	15-4-29	23·20	23·20	
Erode Branch—				
Trichinopoly Junction to Trichinopoly Fort	11-3-62	2.70		
Trichinopoly Fort to Karur	3-12-66	44·60		
Karur to Kodumudi	1-7-67	16·84		
Kodumudi to Erode	1-1-68	23·42	87·56*	
Through Goods line from Commerford Block Station to Broad Gauge Bufferend in Trichy Goods Station.	1-4-31	†1·09	1·09	
GRAND TOTAL				§599·13

*Originally constructed on the 5′—6″ gauge but was converted to 3′—3½″ gauge, Trichinopoly Jn. to Karur on 1st July 1879, and Karur to Erode on 16th December 1879. The whole section was reconverted into 5′ 6″ gauge on 26th September 1929.

†For goods traffic only.

‡Converted into mixed gauge from 1st April 1932.

§This excludes 1·97 miles of mixed gauge between Salem Junction and Salem Market which have been included in the M. G. Route Mileage.

‖Originally constructed on the 3′ 3½″ gauges but was converted to 5′-6″ gauge on 24th October 1934.

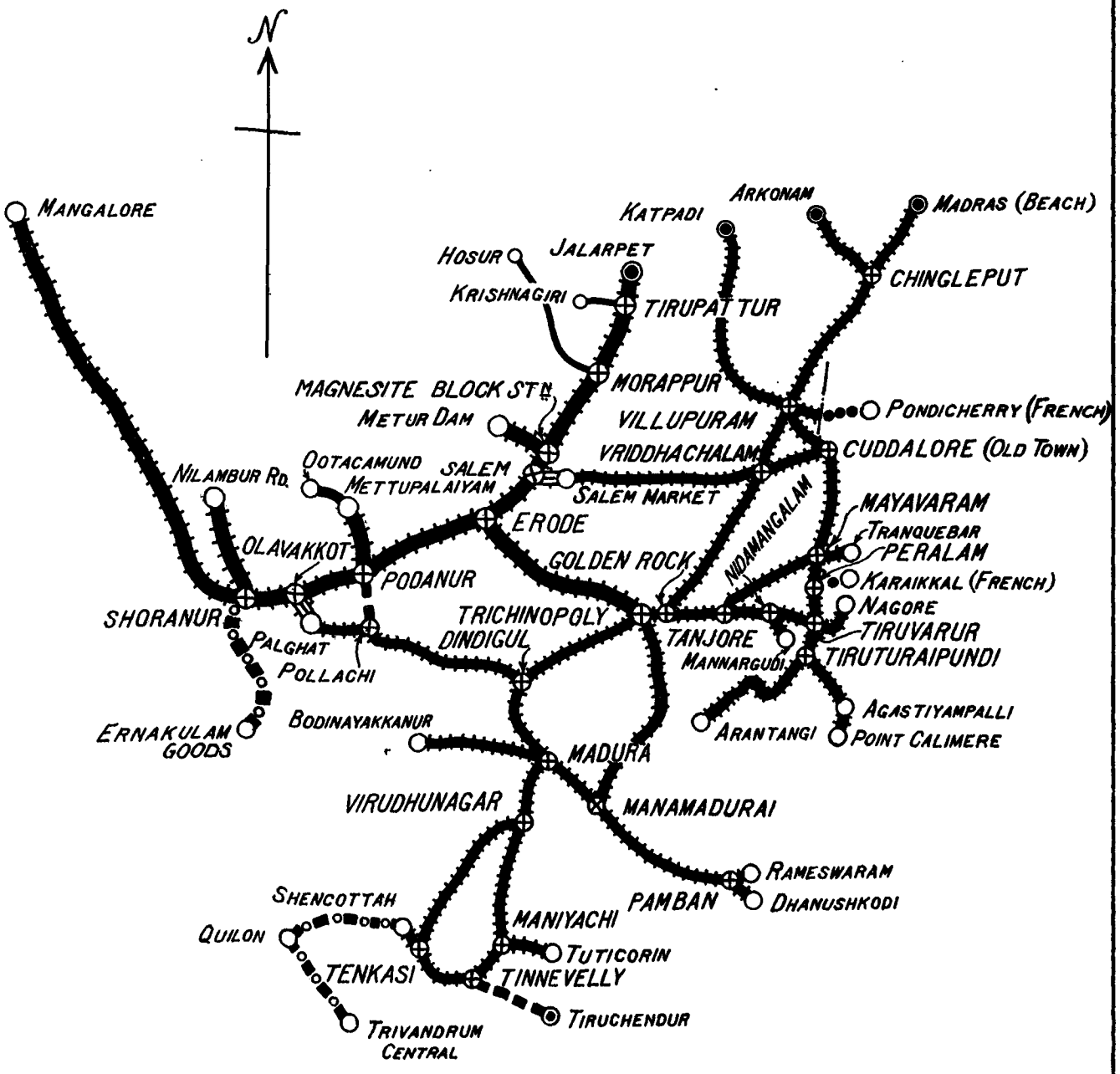
S. I. RAILWAY SYSTEM.

REFERENCES.

	MIXED GAUGE.	5'-6"	3'-3 3/8"	2'-6" & 2'-0"
S. I. Railway				
State lines				
Indian State lines				
Foreign lines				
District Board's lines				
Home, Branch and Local line Junctions			⊕	⊕
Junctions connecting Foreign lines			◉	◉

SCALE IN MILES.

0 25 50 75 100 200 300 MILES.



14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(a) South Indian Railway (5′ 6″ gauge)—*contd.*

Details of construction—

Permanent-way.—The rails are 76-lb. and 80-lb. bull-headed British standard 90-lb. bull-headed, 75-lb. double headed, 60-lb. and 75 lb. flat-footed, B.S. 75 lb. flat-bottomed and British Standard 75 lb. R and 90 lb. R flat-bottomed steel rails. The sleepers are cast iron pots, irumbogam, sâl, irool and jarrah wood, and steel transverse.

Ballast.—The line is ballasted with stone and sand, chiefly the former—except on the Salem-Mettur Dam Section which is ballasted with mooram and gravel.

Fencing.—The line is fenced throughout. The line Shoranur to Nilambur Road is unfenced except at station yards, whereas in Salem-Mettur Dam, both the line and station yards are unfenced.

Curves.—The sharpest curve is of 1,584 feet radius except in Shoranur-Nilambur section, and Salem-Mettur Dam Section where it is 800′ and 955′ radius respectively.

Gradients.—The ruling gradient of the greater part of the line is about 1 in 100 except on Bommidi Ghat where it is 1 in 74 with a 1 in 70 banking and on a length between Kalipatti Road and Sankaridrug where it is 1 in 95; between Podanur and Madukarai on Podanur—Olavakkot Section where it is 1 in 84; on the Walayar ghat where it is 1 in 66 with a 1 in 62 banking; on a small length between Trikarpur and Charvattur on the Azhikkal—Mangalore Section where it is 1 in 90; between Karur and Murthipalayam on the Trichinopoly Erode Branch where it is 1 in 90; on the Podanur—Mettupalaiyam and Shoranur—Nilambur Branches where it is 1 in 80; on the Salem Metur Dam Branch where the ruling gradient is 1 in 66·6.

Contract—

Up to and including the 31st December 1907 the line formed an integral part of the former Madras railway. With effect from the 1st January 1908 it was, in terms of the contract of the 2nd March 1909 between the Secretary of State and the South Indian Railway Company, made over to the Company to be worked and maintained, as an integral part of the undertaking referred to in the principal contract of the 24th November 1890, the main provisions of which are noted under South Indian railway, 3′ $3\frac{3}{8}$″ gauge. With effect from 1st April 1928, the ownership of the Suramangalam-Salem Railway has been transferred from the District Board of Salem to the Government of India and the line is being worked as part of the undertaking. With effect from 1st April 1929 the ownership of the Tanjore District Board Railway has been transferred from the District Board of Tanjore to the Government of India and the line is to be worked as a part of the undertaking, *vide* Railway Board's letter No. 2671-F., dated the 4th February 1929.

Statistics of working—

NOTE.—From the year 1936-37 the $\frac{\text{net earnings}}{\text{working expenses}}$ have been arrived at after taking into account the 'Appropriation to Depreciation Reserve Fund' instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay, given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 .	445·94	6,42,27,971	57,25,148	25,25,034	3·93	247	55·90
1909 .	445·94	6,43,58,255	62,30,385	28,18,753	4·38	269	54·76
1910 .	445·94	6,61,74,084	63,39,154	24,95,532	3·77	273	60·63
1911 .	445·94	6,57,73,175	69,66,156	38,13,140	5·80	300	45·26
1912 .	445·94	6,68,13,600	74,16,071	35,22,022	5·27	320	52·51
1st qr. of 1913.	445·94	6,72,88,570	18,84,615	5,32,409	0·79	325	71·75
1913-14 .	445·94	7,01,73,755	79,54,816	29,91,752	4·26	343	62·39
1914-15 .	445·94	7,13,55,000	78,17,228	32,06,665	4·49	337	58·98
1915-16 .	445·94	7,20,72,632	84,90,992	45,00,975	6·19	366	46·99
1916-17 .	445·94	7,20,78,897	98,22,191	49,48,932	6·87	424	49·61
1917-18 .	445 94	7,18,73,597	1,10,05,446	64,88,044	9·03	475	41·05
1918 19 .	445·94	7,19,02,358	1,15,66,705	67,90,338	9·44	499	41·29
1919-20 .	445·94	7,18,23,587	1,25,81,211	57,87,546	8·06	543	54·00
1920-21 .	445·94	7,31,18,804	1,25,03,450	46,20,780	6·32	539	63·04
1921-22 .	445·94	7,86,59,774	1,28,17,823	19,65,285	2·50	553	84·67
1922-23 .	445·94	8,28,36,429	1,50,61,868	38,86,916	4·69	650	74·19
1923-24 .	445·94	8,35,71,082	1,50,20,309	58,49,640	7·00	648	61·06
1924-25 .	445·94	8,36,64,602	1,51,37,699	71,35,053	8·53	653	52·86
1925-26 .	445·94	8,50,86,637	1,61,00,542	55,35,450	6·51	694	65·02
1926-27 *.	463·48	8,88,56,562	1,60,99,955	69,40,006	7·70	668	56·89
1927-28 .	488·08	9,72,62,033	1,70,54,864	56,15,378	5·77	672	67·07
1928-29 .	491·94	9,97,59,903	1,76,11,505	76,69,346	7·69	688	56·45
1929-30 .	601·97	10,41,39,226	1,91,14,639	86,26,483	8·28	609	54·87
1930-31 .	600·06	10,56,18,302	1,84,52,414	84,63,006	8·01	590	54·14
1931-32 .	599·03	10,80,35,006	1,69,86,230	72,33,957	6·70	541	57·41
1932-33 .	599·03	10,93,84,253	1,66,78,005	65,39,398	5·98	532	60·79
1933-34 .	599·03	10,91,32,467	1,59,56,355	69,32,164	6·35	509	56·56
1934-35 .	598·97	11,11,85,444	1,64,17,772	75,56,326	6·80	526	53·97
1935-36 .	599·14	11,20,09,734	1,64,83,808	70,57,006	6·30	526	57·19
1936-37 .	599·14	11,26,20,372	1,70,84,958	76,89,997	6·83	447	54·99
1937-38 .	599.14	11,30,24,870	1,78,11,619	78,21,567	6.92	570	56.09
1938-39 .	599·13	11,36,47,666	1,77,33,896	76,22,364	6.71	568	57·02

* Includes figures of the Shoranur-Nilambur Railway.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(*b*) Shoranur-Cochin railway (5′ 6″ gauge)—

The Shoranur-Cochin railway is the property of the Cochin Durbar and was worked by the former Madras Railway Company up to the 31st December 1907. With effect from the 1st January 1908 it was made over to the South Indian Railway Company to be maintained and worked as part of its undertaking.

Progress in opening—

Section of railway	Date of opening	Miles.	Total.
1	2	3	4
Shoranur to Ernakulam	16-7-02	65·01	65·01

Details of construction—

Permanent-way.—The permanent-way consists of B. S. 90-lb. R. flat bottomed steel rails laid on hard-wood sleepers. Bearing plates are used at joints and on bridge sleepers only.

Ballast.—The line is ballasted with stone throughout.

Fencing.—The line is fenced only at station yards and approaches to level crossings.

Curves.—The sharpest curve is of 1,432·5 feet radius.

Gradients.—The ruling gradient is 1 in 80 (compensated).

Agreements—

Dated the 1st January 1908, *between His Highness the Raja of Cochin and the South Indian Railway Company*, for maintenance and working.

Dated the 24th May 1915, *between His Highness the Raja of Cochin and the South Indian Railway Company* as to the adoption of Government financial year for the preparation of accounts.

Main provisions of agreements—

(i) *Land.*—Provided by the Cochin Durbar free of cost.

(ii) *Government aid.*—The railway (which is the property of the Cochin Durbar) is maintained and worked by the South Indian Railway Company in all respects as part of their own undertaking except only as to the provision of funds for capital expenditure which are provided by the Durbar.

(iii) *Terms of working.*—For maintenance and working the Shoranur-Cochin railway the Durbar pays to the Company in each half-year—

(*a*) all expenditure on renewals, as distinguished from maintenance expenses, incurred on the Durbar's line;

It has been agreed to charge to the profits of this line during the period of conversion to Broad Gauge, a sum of Rs. 69,989, as the average annual renewal and replacement expenditure, which would normally be incurred but for the conversion scheme, *vide* Railway Board's No. 1303-B. of 29th May 1933.

(*b*) the Durbar's railway share of working expenses arrived at by deducting from the total working expenses of the combined system the expenditure incurred on the combined system for renewals as distinguished from maintenance, and dividing the balance between the Company and the Durbar's railway in the proportion that the gross receipts of the latter bear to those of the combined system; and

As and from 24th October 1934, the date of opening of the converted Broad gauge line, the expenditure on renewals of works and equipment other than Rolling Stock, shall be deducted from the total working expenses of the system for arriving at the Durbar's share of working expenses.

(*c*) the sum payable under the agreement as rent for the use of the Shoranur Junction station based on the total cost of the Junction station.

(*d*) 8 per cent. of the gross earnings of the line towards hire for provision of Rolling Stock by the South Indian Railway from 24th October 1934. This rate is subject to revision on mutual agreement between the South Indian Railway Company and the State. The State

* Originally constructed on the 3′-3½″ gauge but was converted to 5′-6″ gauge on 24th October 1934.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(*b*) Shoranur-Cochin railway (5′-6″ gauge)—*contd.*

Main provisions of agreements—*contd.*

has the option to provide its own Rolling Stock at the end of 5 years subject to the condition that the Rolling Stock as is in use on the said line and which would otherwise become surplus to South Indian Railway should be purchased by the State at prices fixed in accordance with Railway Board's formula.

(iv) *Distribution of profits.*—Any difference between the gross receipts of the Shoranur-Cochin railway and the payment for working under (*iii*) which may exceed 2 per cent. on the booked capital expenditure of the Durbar's line including land are deemed "surplus profits," divisible between the Durbar and the Company in the proportion of four-fifths to the former and one-fifth to the latter.

(v) *Rates and fares.*—Those generally applicable to the South Indian railway system ; *vide* (iv) under South Indian railway (3′ 3⅜″ gauge).

(vi) *Special obligations as to the conveyance of* :—

(*a*) Mails, troops, police, high Government officials and Government stores.
(*b*) Government bullion and coin, and the persons in charge thereof.

} As on Indian State railways.

(vii) *Power of the Government to determine agreement.*—The agreement terminates upon the determination by Government of the South Indian Railway Company's principal contract with the Secretary of State, dated the 24th November 1890 ; *vide* (vii) under South Indian railway (3′ 3⅜″ gauge).

(viii) *Power of the Cochin Durbar to determine agreement.*—
(ix) *Power of the Company to determine agreement.*—

} On giving 12 months' notice expiring on the 30th September or before the 31st March in the succeeding year

(x) *Term of agreement.*—Subject to (vii), (viii) and (ix).

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	64·75	69,85,278	6,59,639	2,79,356	4·00	196	57·65
1914-15	64·75	70,15,724	6,68,795	2,73,627	3·90	199	59·09
1915-16	64·75	70,51,322	7,01,335	3,21,080	4·55	208	54·22
1916-17	64·75	71,01,101	7,86,177	4,12,268	5·81	233	47·56
1917-18	64·75	71,08,152	8,87,643	4,92,171	6·92	264	44·55
1918-19	64·75	71,17,043	8,89,886	4,32,286	6·07	264	51·42
1919-20	64·75	71,26,183	9,74,638	3,98.009	5·59	289	59·16
1920-21	64·75	71,11,812	10,17,567	4,74,296	6·67	302	53·39
1921-22	64·75	72,75,887	9,24,715	1,12,206	1·54	275	87·87
1922-23	64·75	74,88,749	11,30,059	3,55,828	4·75	336	68·51
1923-24	64·75	75,40,784	11,26,050	3,71,675	4·93	334	66·99
1924-25	64·75	75,25,577	8,47,956	1,01,248	1·35	252	88·06
1925-26	64·75	75,32,008	11,38,807	4,67,212	6·20	338	58·97
1926-27	64·75	75,57,342	12,13,567	5,36,163	7·09	360	55·82
1927-28	64·75	75,65,545	13,20,812	6,26,987	8·29	392	52·53
1928-29	64·75	75,70,308	14,37,990	6,28,151	8·30	427	56·32
1929-30	64·75	75,87,999	14,06,704	7,10,513	9·36	418	49·49
1930-31	64·75	(*a*)76,28,517	13,41,435	5,40,711	7·09	397	59·69
1931-32	64·75	(*b*)99,50,591	13,76,547	5,71,538	5·74	407	58·48
1932-33	64·73	(*c*)1,15,88,776	13,99,443	4,98,538	4·30	415	64·37
1933-34	64·73	1,31,09,554	14,90,775	(*d*)5,73,401	4·37	442	61·54
1934-35	64·69	1,06,08,205	16,64,321	5,80,375	5·47	493	65·13
1935-36	65·01	1,04,81,612	17,27,334	5,16,563	4·93	510	70·09
1936-37	65·01	(*e*)1,05,05,775	16,60,272	5,04,378	4·80	490	69·62
1937-38	65·01	(*f*)1,08.94,035	16,70,940	4,91,627	4·51	493	70·58
1938-39	65·01	(*g*)1,12,99,871	16,86,725	5,01,829	4·44	498	70·25

NOTE.—The figures furnished for 1933-34 and previous periods relate to Metre gauge whilst those for 1934-35 include M. G. figures upto 24th October 1934 and B. G. figures for the subsequent period.

(*a*) Includes outlay on Shoranur-Ernakulam Railway Conversion, *i.e.*, Rs. 11,169.

(*b*) Includes outlay on Shoranur-Ernakulam Railway Conversion, *i.e.*, Rs. 22,95,936.

(*c*) Includes outlay on Shoranur-Ernakulam Railway Conversion *i.e.* Rs. 39,54,216.

(*d*) Arrived at without taking into accounts the programme Revenue expenditure borne by the Cochin Darbar in connection with the conversion of the line to Broad gauge as in the previous years.

(*e*) Excludes Rs. 1,96,600 being the Revenue Expenditure on Shoranur remodelling works charged to Cochin Government and treated as Capital expenditure of Shoranur-Cochin Railway ranking for interest.

(*f*) Includes Rs. 5,58,114 being the Capital outlay incurred in the construction of the Idappalli-Ernakulam Extension of the Shoranur-Cochin Railway financed by the Cochin Government and excludes Rs. 2,09,602 being the Programme Revenue expenditure on the Shoranur Remodelling works charged to the Cochin Government and treated as the Shoranur-Cochin Railway Capital ranking for interest.

(*g*) Includes Rs. 10,02,322 being the capital outlay incurred in the construction of the Idappalli-Ernakulam Extension of the Shoranur-Cochin Railway (not yet opened for traffic) financed by the Cochin Government and excludes Rs. 2,13,472 being the programme Revenue expenditure on the Shoranur Junction. Remodelling Works charged to the Cochin Government and treated as the Shoranur-Cochin Railway Capital ranking for interest.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(c) South Indian railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of Railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5	Remarks. 6
MADRAS-DHANUSHKODI SECTION—					
Main Line—					
Madras Beach Junction to Madras Beach	15-1-00	0·11			(a) The section between Madras Beach to Egmore 2·59 miles is electrified double line. The section between Madras Egmore to Tambaram 15·55 miles is triple line of which two lines are electrified, opened on the 11th May 1931.
Madras Beach old to Park	1-1-79	1·81(a)			
Madras Park to Tindivanam	1-9-76	76·86(a)			
Tindivanam to Cuddalore Old Town	1-1-77	51·37			
Cuddalore Old Town to Porto Novo	1-7-77	17·15			
Porto Novo to Chidambaram	1-10-78	6·73			
Chidambaram to Coleroon	1-7-79	4·78			
Coleroon to Shiyali	1-1-78	6·06			
Shiyali to Mayavaram	1-7-77	12·24			
Mayavaram to Tanjore	15-2-77	43·76			
Tanjore to Trichinopoly Junction.	11-3-62	31·50*			*Originally constructed on the 5′ 6″ guage but was converted to 3′ 3⅜″ gauge. Tanjore to Budalore 10·85 miles on 10th July 1875 and Budalore to Trichinopoly Junction 20·14 miles on 17th July 1875. The section between Golden Rock and Trichinopoly Junction is a double line and the length is 2·25 miles.
Trichinopoly Junction to Pudukkottai	17-4-29	32·74			
Puddukkotai to Manamadura	1-7-30	59·89			
Manamadura to Mandapam	1-8-02	60·39			
Mandapam to Pamban	1-1-14	3·12			
Pamban to Rameswaram Road	15-10-27	6·77			
Rameswaram Road to Dhanushkodi Jetty	10-12-08	10·64			
Dhanushkodi Jetty to Dhanushkodi point	1-12-14	0·07	425·99		
Branches—					
Arkonam Branch—					
Chingleput to Walajabad	1-8-80	13·66			†Originally constructed on 5′ 6″ gauge but was converted to 3′ 3⅜″ gauge in sections on 12th, 13th and 14th July 1878.
Walajabad to Conjeevaram	1-1-81	7·94			
Conjeevaram to Arkonam	8-5-65	17·65†	39·25		
Katpadi Branch—					
Villupuram to Tiruvannamalai	17-11-90	41·80			
Tiruvannamalai to Katpadi	18-3-91	57·13	98·93		
Pondicherry Branch—					
Villupram to the Gingee river inclusive of the bridge over the river	15-12-79	16·47	16·47		
Villupuram Trichinopoly Railway—					
Villupuram to Vriddhachalam	1-12-27	33·59			
Vriddhachalam to Lalgudi	1-2-29	58·97			
Lalgudi to Bikshandar koil	10-3-28	6·61			
Bikshandarkoil to Srirangam	12-12-27	2·75			
Srirangam to Golden Rock	22-8-27	5·65	107·57		
Cuddalore Vriddhachalam Railway—					
Cuddalore to Vriddhachalam	21-6-28	35·36	35·36		
Salem Vriddachalam Railway—					
Salem Junction to Salem Market	1-1-17	1·97‡			‡Originally constructed on the 5′ 6″ gauge but was converetd into a mixed gauge on 3rd February 1931 used for B. G. Goods traffic only.
Salem Market to Salem Town	1-1-17	1·89§			
Salem Town to Chinnasalem	3-2-31	50·94			
Chinnasalem to Vriddhachalam	17-8-31	31·69	86·49		
Tranquebar Branch—					
Mayavaram to Tranquebar	25-11-26	17·98	17·98		§Originally constructied on 5′ 6″ gauge but was converted into 3′ 3⅜″ gauge on 3rd February 1931.
Mayavaram Arantangi Railway—					
Mayavaram Junction to Mutupet	2-4-94	53·61			
Mutupet to Pattukottai	20-10-02	17·03			
Pattukottai to Arantangi	31-12-03	28·35	98·99		
Mannargudi Branch—					‖Originally constructed on the 5′ 6″ gauge but was converted to 3′ 3⅜″ gauge. Tanjore to Nidamangalam 18·65 miles on 3rd July 1875 and Nidamangalam to Tiruvarur 15·10 miles on 26th January 1875.
Nidamangalam to Mannargudi	15-2-15	8·41	8·41		
Tirutturaipundi-Point Calimere Railway—					
Tirutturaipundi to Agastiyampalli	15-5-19	22·94			
Agastiyampalli to Point Calimere	20-1-36	5·39	28·33		
Nagore Branch—					
Tanjore to Tiruvarur	2-12-61	33·75‖			¶Originally constructed on the 5′-6″ gauge but was converted to 3′ 3⅜″ gauge on 19th June 1875.
Tiruvarur to Negapatam	15-7-61	14·33¶			
Negapatam to Nagore	1-12-99	4·67	52·75		
Through goods line between Trichinopoly Junction and Golden Rock *via* classification Yard.	1-4-31	1·59	1·59		
Trichinopoly Tuticorin Section—					
Trichinopoly Junction to Madura	1-9-75	95·98**			**Originally part of main line since shown as branch line. Trichinopoly Manamadura Chord is included in main line.
Madura to Tuticorin	1-1-76	98·13			
Tuticorin to Foreshore	7-8-99	0·40	194·51		
Dindigul Pollachi Railway—					
Dindigul to Pollachi	19-11-28	74·51	74·51		
Pollachi Palghat Railway—					
Pollachi to Palghat	1-4-32	34·10	34·10		
Madura Manamadura Section—					
Madura to Manamadura.	1-8-02	29·00	29·00††		††Originally formed part of main line since shown as branch line. Trichy Manamadura Chord is included in main line.
Madura Bodinayakanur Railway—					
Madura to Bodinayakanur	20-11-28	55·60	55·60		
Carried over	..	..	1,405·83		

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(c) South Indian railway (3′ 3⅜″ gauge)—*contd.*

Progress in opening—*contd.*—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand Total. 5	Remarks. 6
Brought forward ..	..	..	1,405·83		
Rameswaram Branch—					
Pamban to Rameswaram	1-9-06	7·04	7·04*		*Originaly formed part of main line, since converted into a branch line.
Virudhunagar-Tenkasi Railway—					
Virudhunagar to Tenkasi	30-6-27	75·01	75·01		
Tinnevelly Branch—					
Maniyachi to Tinnevelly	1-1-76	18·39	18·39		
TOTAL OPEN MILEAGE . .	..	..	..	1,506·27	
GRAND TOTAL INCLUDING DOUBLE AND TRIPLE LINE.	..	..	..	1,506·27	
Double Line—					
Madras Beach to Egmore	..	2·59†			†Electrified.
Golden Rock to Trichinopoly Junction . .	..	2·25	4·84		
Triple Line—					
Egmore to Tambaram	..	15·55‡	15·55		‡Two lines electrified.

Details of Construction—

Permanent-way.—The rails in use are 50-lb. bull-headed and British Standard 60-lb. bull headed B.-S.40-lb. 41¼ lb., 55-lb, 56-lb. and B. S. 60-lb. flat bottomed and British Standard 50-lb. 'R' 60-lb. 'R' and 75-lb. 'R' flat bottomed steel rails. The 55-lb. rails are laid on the Pamban, viaduct only. The sleepers are cast iron pots, steel transverse, sal, pynkado, west coast teak, Jarrah and Irool wood.

Ballast.—The line is ballasted throughout, partly with broken stone and partly with laterite and gravel interspersed.

Fencing.—The line is fenced, with the exception of the Villupuram-Katpadi, Madura-Mandapam, Pamban Dhanushkodi, Mayavaram-Tranquebar, Tirutturaipundi-Point Calimere Sections, Villupuram-Trichinopoly Railway, Virudhunagar-Tenkasi Railway, Dindigul-Pollachi Railway, Cuddalore-Vriddachalam Railway and Trichinopoly-Manamadura Railway which are fenced only at stations.

Madura-Bodinaykkanur Railway, Salem-Attur-Vriddhachalam Railway and Pollachi-Palghat Railway have no fencing either alongside the line or around station yards.

Curves.—The sharpest curve is of 819 feet radius except on the Chingleput-Arknonam Branch where it is of 792 feet, on the Pamban-Rameswaram section where it is of 700 feet and on the Negapatam-Nagore Section where it is of 500 feet radius.

Gradients.—The ruling gradient is 1 in 200, except on a length between Pandiyapuram and Kailasapuram on the Maniyachi-Tuticorin Section where it is 1 in 167 and on length between Adirampatnam and Sendakottai on the Arantangi Branch where it is 1 in 160; on the Villupuram-Katpadi, Villupuram-Cuddalore, Cuddalore-Vriddhachalam, Salem-Vriddhachalam, Trichinopoly-Madura, Dindigul-Pollachi and Pollachi-Palghat sections where it is 1 in 100 and on the Madura-Bodinayakkanur Branch where it is 1 in 80.

Contracts—

Dated the 24th November 1890 (called the principal contract), *between the Secretary of State and the South Indian Railway Company*, for maintaining and working from the 1st January 1891, the railways which on the 31st December 1890 formed the undertaking of the former Company and completing and working the Villupuram-Guntakal railway.

Dated the 27th June 1901 (supplemental to the principal contract), *between the Secretary of State and the South Indian Railway Company*, relating to the construction and working of Pamban and Travancore branches.

Dated the 8th April 1903 (supplemental to the principal contract), *between the Secretary of State and the South Indian Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange. [Cancelled as from the 1st October 1921 under the contract of 6th December 1923.]

Dated the 2nd March 1909 (supplemental to the principal contract), *between the Secretary of State and the South Indian Railway Company*, providing for the relinquishment from 1st January 1908 of the section of the Company's line north of Katpadi and the transfer to the Company from the same date of the Jalarpet-Mangalore section of the former Madras railway.

Dated the 26th October 1909 (supplemental to the principal contract), *between the Secretary of State and the South Indian Railway Company*, for the construction and working as an integral part of the undertaking of the Dharmapuri-Hosur extension of the Morappur-Dharmapuri railway.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(*c*) **South Indian Railway** (3′ 3⅜″ gauge)—*contd.*

Contracts—*contd.*

Dated the 21st December 1910, *between the Secretary of State and the South Indian Railway Company* supplemental to and continuing with further modifications, with effect from 1st January 1911, the principal contract of the 24th November 1890 as modified by previous supplemental contracts.

Dated the 23rd April 1914 (supplemental to the contracts of 1901, 1903, 2nd March and 26th October 1909 and 1910), *between the Secretary of State and the South Indian Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

Dated the 6th December 1923 (supplemental to the contracts of 1890, 1901, 1903, 2nd March and 26th October 1909, 1910, 1913 and 1914), *between the Secretary of State and the South Indian Railway Company*, as to compiling Accounts and Statistics annually instead of half-yearly and as to rate of exchange.

Dated the 15th May 1929 (supplemental to the above contracts), *between the Secretary of State and the South Indian Railway Company*, regarding the adoption with effect from 1st October 1928 of the uniform rate of exchange of 1*s.* 6*d.* the rupee subject to the determination of the same by at least six months' notice on either side, such notice expiring on the 31st day of March or the 30th day of September in any year.

Dated the 13th Day of May 1932 (supplemental to the above contract), *between the Secretary of State and the South Indian Railway Company*, regarding the treatment of moneys advanced by the Secretary of State to the Company since 31st day of December 1910, for the purpose of providing for capital expenditure on the Company's Undertaking, and with regard to expenditure on the construction of extensions of the South Indian Railway, and the incorporation of certain Railways in the undertaking.

Dated the 22nd day of June 1933 (supplemental to the above contracts), *between the Secretary of State and the South Indian Railway Company*, regarding the working of the following extensions :—

(*i*) Vriddhachalam-Cuddalore Railway which was opened for traffic in the month of June 1928,

(*ii*) Shoranur-Nilambur Railway which was opened for traffic in the month of October 1927, and

(*iii*) Salem-Mettur Dam Railway which was opened for traffic in the month of April 1929.

Dated the 4th February 1937 *between the Secretary of State and the South Indian Railway Company*, regarding rates for recovery of rent in respect of buildings provided for the Postal Department of the Government of India.

Main provisions of contracts—

(i) *Land.*—Provided by the Government at the cost of capital.

(ii) *Government aid.*—Guarantee of 3½ per cent. in sterling on the Company's share capital of £1,000,000 and on any paid-up stock or share (other than preference) capital thereafter issued by the Company with the sanction of the Government (not including premia paid thereon).

(iii) *Distribution of profits.*—Under section 60 of the principal contract of the 24th November 1890 as amended by section 25 of the supplemental contract of the 1st December 1910, and clause 6 of the Supplemental Contract of 13th May 1932 the net revenue receipts of each half-year are applied, in the following manner and order :—

In payment to Government—

(*a*) of interest at the rate of 3½ per cent. per annum for such half-year, paid by Government under section 41 of the principal contract, *i.e.*, under (ii) above ;

(*b*) of the amount paid by Government in respect of interest for such half-year, upon the sum of £425,000 irredeemable debenture stock of the former Company ; and upon any debenture stock or debentures or preference stock or shares issued by the Company after the 31st December 1910 ;

Note.—The Pamban debentures have now been paid off and the amounts advanced by Government for the purpose are subject to a special arrangement.

(*c*) of interest for such half-year at the rate of 3½ per cent. per annum on the amount of the Government capital as shown in the Government capital account for the division of such receipts ; and

(*d*) The Secretary of State has agreed to the exclusion, with effect from the 1st October 1924 from the Government capital account for the division of net revenue receipts of the then outstanding advances made by him for the purpose of the undertaking in excess of

***Note.*—Clauses (*a*) and (*c*) are not operative from 1st April 1925.**

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(c) South Indian railway (3′ 3⅜″ gauge)—*contd.*

Rs. 19,50,00,000 (including the advance for paying off a portion of the Pamban debentures) together with the further advances made up to the 31st March 1925 and to the similar exclusion with effect from 1st April 1926 of the advances made during the year ending 31st March 1926, on the understanding—

(1) that interest at the rate of 5½ per cent. per annum on the amount so excluded shall be charged against the net revenue receipts of the undertaking before division of the residue, and

(2) that the Secretary of State will retain his right to call upon the Company at any time to repay the whole or any part of the advances referred to. (India Office letter No. P. W.-2346-24, dated the 3rd November 1924.)

(e) The Secretary of State has agreed to antedate for the periods 4th July 30th—September 1924 and 4th January—31st March 1926 the arrangement already sanctioned with effect from the 1st October 1924 and the 1st April 1926 respectively, *i.e.*, to exclude, during those periods the rupee equivalent of £175,000 and £200,000 from the Government Capital Account, interest thereon at the rate of 5½ per cent. per annum being charged against the net revenue receipts of the undertaking before division of the residue. (India Office letter No. P. W.-2524—26, dated the 26th July 1926).

The rate of interest of 5½ per cent. on the Secretary of State's advances up to 31st March 1926 for the purpose of the undertaking in excess of Rs. 19,50,00,000 (including the advances for paying off portions of Pamban Branch Debentures) should be treated as fixed until 31st December 1945, the earliest date for the termination of the Company's contract when the question of the varying rate will be dealt with if necessary in the light of the then prevailing conditions. (India Office letter No. P.W.-1834, dated the 20th May 1926).

(f) The profit-sharing advances of the Secretary of State outstanding on the 30th September 1928 shall, with effect from the 1st October 1928, be excluded from the Government capital account for the division of Net Revenue Receipts, and shall carry a fixed rate of interest at 5½ per cent. Advances made after 30th September 1928 will not be dealt with in this way but will rank as profit sharing capital of the Secretary of State, subject to the right of the Company to apply for a further adjustment if and when the amount outstanding reaches the equivalent of the figure of £3,000,000.

The profit sharing advances of the Secretary of State outstanding on the 1st April 1929 shall, with effect from 1st April 1929, be excluded from the Government Capital Account and bear the fixed rate of interest at 5½ per cent. per annum. It has also been agreed that any future readjustment of the contract portions of the Secretary of State's and Company's profit sharing advances, shall be made with effect from the beginning of the half year following that in which the Secretary of State's profit sharing advances shall have exceeded Rs. 19,50,00,000 by not less than the equivalent in rupees of £3,000,000 on the Company's application for such readjustment, *vide* clauses 1 (*e*) and 10 of the Supplementary Contract of 13th May 1932.

The profit sharing advances of the Secretary of State outstanding on 31st March 1934, shall, with effect from 1st April 1934, be excluded from the Government Capital Account for division of Net Revenue receipts and carry a fixed rate of interest @ 4 % per annum, payable before division of residue, the arrangement to continue until the 31st December 1945, and the Secretary of State reserving his existing right to call upon the Company at any time to repay the whole or any part of the advances. Advances made after 31st March 1934 are to rank as profit sharing capital of the Secretary of State, *vide* India Office letter No. F.-1026/34, dated 21st February 1934 subject to the right of the company to apply for a further adjustment, if and when the amount outstanding reaches the equivalent of the figure of £3,000,000, *vide* clause 10 of the Supplementary contract, dated 13th May 1932.

Note.—Interest on the non-profit sharing advances of the Secretary of State made up to the end of March 1929 shall, with effect from 1st April 1939, be charged at a fixed rate of 4¾ % per annum, this rate to remain unaltered up to 31st December 1945.

(g) The residue, if any, is divisible between the Government, the Company and the Salem District Board whose Railway has been transferred to the Government of India with effect from 1st April 1928, and with effect from 1st April 1929 also of the Tanjore District Board whose lines have been transferred to the Government of India on that date, in the ratio of the actual amounts of the capital contributed by the Government, the Company, and the District Boards concerned, the Government Capital being the amount shown in the Government capital account for the division of net revenue receipts, the Company's capital being the amounts of its stock, and share capital (other than preference capital) paid up or credited as paid up, excluding any premia received, and the capital of the District Boards on the dates of the transfer of the ownership of their lines to the Government of India.

For the purpose of payment of dividends to the Salem District Board, the Capital of the District Board will be inflated to such an extent as to give the District Board the same return on their Capital as they obtained in the last year before the transfer of ownership (*i.e.*, 1927-28). The Tanjore District Board's capital is subject to the guarantee of a minimum dividend of 3½ per cent per annum.

The Tanjore District Board's Capital for purposes of payment of dividend to the District Board, will be the capital outlay of the Tanjore District Board Railway *plus* the outlay on Mayavaram-Tranquebare Railway construction met out of funds provided by the District Board with interest charges thereon to end of March 1929, calculated at the rates applicable to Secretary of State's advances to Railway Companies, as per Railway Board's No. 2519-F., dated 16th June 1933.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(c) South Indian railway (3′ 3⅜″ gauge)—*contd.*

Main provisions of contracts—*concld.*

(*h*) As between the Secretary of State and the Company, the Vriddhachalam-Cuddalore Railway is to be worked as part of the undertaking on the ordinary terms, *i.e.*, without any guarantee.

NOTE.—The guarantee recoverable from the District Board towards loss in working this line is to be credited to the Secretary of State, *vide* Railway Board's No. 6561-F. of 25th May 1932.

Shoranur-Nilambur and Salem-Mettur Dam Railways shall as from the times when the same were respectively opened for traffic, be worked by the South Indian Railway Company not as a part of the undertaking but at the expense, and on behalf of the Secretary of State, at actual cost *plus* 8 per cent. of the Gross Earnings for hire of Rolling Stock *plus* appropriate share of Joint Station expenditure at Shoranur and Salem Junction Stations respectively *vide* clauses 2 and 3 of the Supplemental Contract dated 22nd day of June 1933.

The contract of 1910 has been revised with effect from 1st April 1925, and the residue for each half year of net revenue receipts, remaining after the deduction of interest charges on all debentures and other non-profit sharing capital, and other Miscellaneous charges at present made, such as loss on the working of the Travancore Railway, is to be divided between the Secretary of State, and the Company in proportion to the actual amounts of the profit sharing capital of each, at the end of the half year ; but the Company's share of the residue of net revenue receipts thus arrived at for the two half years comprised in a financial year is not to be paid until the amount of net revenue receipts for the second half year has been ascertained and any deficiency of net revenue receipts in either of the two half years for payment of charges enumerated above made good from the surplus of the other two half-years and further that the Company's share of such residue for any year is to be reduced by the amount previously paid to them as guaranteed interest for that year.

In respect of the new extensions of the Railway opened up-to-date and to be opened hereafter (unless it shall be otherwise agreed in the case of any such further extension) a separate capital account of the expenditure incurred on each such extension, and a half-yearly revenue account showing its net earnings (if any), shall be maintained, to end of the half year in which it is opened for public traffic throughout, and the interest charges on that outlay less any net earnings for that period, shall be debited half-yearly to the Construction capital account. The total capital expenditure to end of the half year of opening of each extension is brought into the Government Capital account on the 1st day of the subsequent half year for division of net revenue receipts, *vide* clause 3 of the supplementary contract of 13th May 1932. In the case of Mayavaram-Tranquebar Railway, the amount contributed by the Tanjore District Board towards the cost of the construction of this line together with interest thereon to end of March 1929, shall, as from 1st April 1929, be excluded from the Government Capital Account for division of net Revenue receipts but included in the capital contributed by the Tanjore District Board for purposes of apportionment of surplus profits *vide* Clause (*g*), page 199.

It has also been agreed that—

(*a*) all moneys advanced by the Secretary of State to the Company for the purchase of stores shall be entered in the Government Capital Account for the division of net revenue receipts,

(*b*) immediately upon the value of any such stores being charged off to revenue, such value shall be deducted from the amount shown in the Government Capital Account,

(*c*) value of stores in stock of a distinctive kind specially purchased for use on the Coonoor Ootacamund Railway extension shall be excluded from the Government Capital Account for division of net revenue receipts,

(*d*) only the amounts actually drawn by the Company from Government but not repaid shall be entered in the aforesaid Government Capital Account. That is, 10 per cent. retention money deducted from the Contractor's bills and other amounts held at the credit of deposits capital which, when finally adjusted would go towards reduction of capital, should be deducted from the aforesaid Government Capital account, and

(*e*) the amounts of cheques drawn on capital account shall be entered in the aforesaid Government Capital account on the dates on which they are cashed but not earlier.

(iv) *Rates and fares.*—The Government will from time to time authorise maxima and minima rates, and prescribe the several classes and descriptions of passengers and goods to which such rates shall be respectively applicable, as well as the extent to which, within the authorised maxima and minima, the Company may vary the said rates.

The Company have power to quote through rates and fares for both goods and passengers from the Jalarpet-Mangalore section to the Madras-Bangalore section of the Madras and Southern Mahratta railway system (but not in the reverse direction), divisible between the two companies in mileage proportion without deduction of terminals or other special charges except for traffic to and from the Nilgiri line the mileage over which is reckoned at twice its actual mileage in the division of such rates. No rate or fare to Madras so quoted should, without the prior sanction of the Government, be higher than that which, for the same class or description of traffic, was in force on the 1st January 1910.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(c) **South Indian railway** (3′ 3⅜″ gauge)—*contd.*

(v) *Special obligations as to the conveyance of*—

(a) Mails, troops, police, high Government officials and Government stores.—To be conveyed on the same general conditions as on State railways of the same gauge.

(b) Government bullion and coin, and the persons in charge thereof.—To be conveyed at special rates to be approved by Government.

(vi) *Services for any Department of the Travancore Durbar.*—On such portion of the Travancore Branch as runs through the Indian State of Travancore, to be performed on the same general condition as on other 3′ 3⅜″ gauge State railways and at rates approved by the Government.

(vii) *Power of the Government to determine contract.*—The railway and all its appurtenances are absolutely the property of Government, who may terminate the contract on the 31st December 1945, or at the end of any succeeding fifth year, by giving to the Company in England not less than 12 calendar months' previous notice; also at any time on 6 months' notice should the Company fail to observe its obligations or the undertaking be worked at a loss for not less than three half-years continuously.

On the expiration or determination of the contract the Government are to take possession of the railway and all its appliances, etc., repaying the Company at par its capital of £1,000,000, and any further capital raised by it, and paid to Government, but excluding any premia paid thereon, and receiving from the Company any unexpended balance of the capital advanced by Government for the purposes of the undertaking as well as for the Travancore Branch.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—55 years, *i.e.*, from 1st January 1891 to 31st December 1945, subject to (vii).

Statistics of working (Those for the periods prior to 1891 will be found in Appendix 83 to the Railway Administration Report for 1907).—Includes the South Indian (5′ 6″ gauge), Nilgiri, Morappur-Hosur and Tirupattur-Krishnagiri railways from 1908.

NOTE.—From the year 1936-37 the $\frac{\text{net earnings}}{\text{working expenses}}$ have been arrived at after taking into account the Appropiation to Depreciation Reserve Fund instead of actual expenditure on 'Replacements and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay, or capital at charge, given in column (3).	Interest.	Company's share of surplus profits (based on terms of contract) attributable to each year.	Amount payable to District Boards.	Percentage of Company share of net earnings (surplus profits *plus* guaranteed interest on share capital) on Company's capital.	Gain or loss to the State pertaining to each year.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	(f) 3	4	5	6	(f) 7	8	9	10	11	12	13
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	Rs.	
1891 .	900·76	7,72,11,806	70,36,750	24,29,625	3·15	35,89,736	70,901	..	..	—12,31,012	154	65·47
1892 .	1,105·19	7,82,83,761	77,14,996	28,53,591	3·65	39,51,093	76,586	..	..	—11,74,088	137	63·01
1893 .	1,041·51	7,63,31,043	80,92,415	13,15,918	4·08	38,58,152	1,41,676	..	..	—8,83,910	149	61·50
1894 .	1,041·51	7,64,13,362	80,46,559	32,83,865	4·30	42,81,812	1,55,059	..	..	—11,53,006	148	59·19
1895 .	1,041·59	7,68,38,604	89,14,947	38,96,987	5·07	42,77,578	2,60,599	..	..	6,41,190	165	56·29
1896 .	1,041·59	7,67,63,325	89,45,581	40,27,489	5·25	40,60,677	2,86,156	..	..	—3,19,344	165	54·98
1897 .	1,041·59	7,66,46,858	91,81,409	42,96,757	5·61	38,76,142	3,37,792	..	..	+82,823	170	53·20
1898 .	1,017·88	7,45,21,873	84,67,581	38,35,527	5·15	37,49,521	2,66,184	..	..	—1,80,178	157	54·70
1899 .	1,030·53	7,53,12,929	84,74,461	39,83,540	5·29	36,38,393	3,01,776	..	..	+43,371	159	52·99
1900 .	1,033·63	7,62,95,528	89,04,825	43,97,916	5·76	36,62,994	3,68,699	..	..	+3,66,223	166	50·61
1901 .	1,033·63	8,04,49,712	1,01,44,657	54,15,176	6·73	37,23,736	5,43,890	..	..	+11,47,550	188	46·62
1902 .	1,123·13	8,18,32,571	1,05,51,072	56,87,510	6·95	38,81,209	5,33,246	..	..	+13,36,055	189	46·10
1903 .	1,123·13	8,31,40,665	1,22,14,138	72,76,216	8·75	39,06,079	7,89,547	..	..	+25,80,590	209	40·43
1904 .	1,123·13	8,45,16,652	1,25,12,321	69,62,700	8·24	40,55,602	7,16,725	..	..	+21,90,463	214	44·25
1905 .	1,123·05	8,62,95,191	1,20,84,476	65,77,330	7·62	40,05,713	6,30,603	..	.	+19,41,014	221	49·15
1906	1,130·00	8,91,97,605	1,32,75,295	68,02,976	7·61	40,92,722	4,94,281	..	..	+13,05,973	227	55·61
1907 .	1,129·85	9,06,35,408	1,41,19,421	71,69,813	7·91	38,76,608	6,71,818	..	..	+26,21,387	240	49·22
1908 .	1,395·61	15,07,19,882	2,04,61,326	94,20,016	6·25	46,89,556	6,98,860	..	..	+40,31,600	282	53·96
1909 .	1,395·61	15,37,78,715	2,17,41,647	1,01,90,046	6·54	49,52,436	7,44,562	..	..	+44,93,048	309	53·13
1910 .	1,395·61	16,08,95,627	2,24,59,591	1,02,34,257	6·36	51,05,988	7,13,317	..	..	+44,14,952	309	54·43
1911 .	1,395·61	16,28,91,154	2,49,91,786	1,24,16,673	7·62	52,77,315	3,20,622	..	5·64	+68,18,736	344	50·32
1912 .	1,395·61	17,03,55,986	2,70,84,141	1,31,63,987	7·73	54,89,120	3,58,165	..	5·89	+73,16,702	373	51·39
1st qr. of 1913	1,395·61	17,32,28,471	66,27,737	27,15,071	1·49	14,07,085	45,705	..	1·18	+12,62,281	376	59·85
1913-14	1,453·60	18,20,41,473	2,80,70,002	1,17,27,795	6·42	78,71,650	2,24,394	..	5·00	+36,31,745	373	58·22
1914-15	1,455·17	18,75,61,932	2,72,73,211	1,16,22,805	6·14	63,34,802	1,79,159	..	4·69	+50,08,844	359	57·75
1915-16	1,455·17	18,96,35,625	2,95,90,946	1,49,91,076	7·90	65,33,607	4,32,328	..	6·38	+80,25,141	389	48·54
1916-17	1,455·17	18,78,31,769	3,28,83,253	1,62,25,740	8·64	64,44,493	5,17,105	..	6·95	+92,64,142	425	49·89
1917-18	1,455·17	18,77,65,036	3,53,66,666	2,02,02,479	10·76	65,29,673	8,02,782	..	8·85	+1,28,70,024	465	42·58
1918-19	1,455·17	18,73,23,806	3,56,30,133	1,96,05,247	10·47	65,33,361	17,64,444	..	8·60	+1,23,07,442	469	44·98
1919-20	1,455·07	18,86,61,854	4,01,49,515	1,82,46,245	10·01	57,37,710	18,09,917	..	8·30	+1,16,98,618	528	54·51
1920-21	1,455·07	†20,93,60,000	4,07,28,036	1,58,94,017	7·59	69,44,679	7,11,217	..	7·01	+82,38,121	536	60·98
1921-22	1,455·07	†22,36,38,000	4,40,03,089	1,24,45,892	5·50	78,15,593	2,16,799	..	4·77	+44,13,500	576	71·71
1922-23	1,445·71	†23,55,75,000	4,88,99,408	1,44,84,720	6·15	83,66,488	2,92,039	..	5·50	+58,20,193	644	70·38
1923-24	1,444·53	†23,42,31,038	5,07,03,023	2,17,95,199	9·31	87,14,987	7,10,025	..	8·14	+1,23,66,587	667	57·01
1924-25	1,444·51	†24,03,62,212	4,96,15,859	2,23,99,845	9·50	87,62,936	7,82,446	..	8·42	+1,30 54,463	651	54·45
1925-26	1,444·51	†24,92,55,057	5,23,71,342	2,19,43,774	8·80	91,46,418	7,38,272	..	8·02	+1,20,59,084	689	58·10
1926-27	1,480·25	†26,21,67,223	5,26,18,173	2,43,16,873	9·28	98,78,378	8,68,407	..	8·92	+1,35 70,088	675	53·79
1927-28	1,486·14	†28,82,11,723	5 60,87,528	2,22,05,340	7·70	1,00,75,213	6,07,538	..	7·17	+1,06 22,589	670	60·41
1928-29	1,865·01	†33,73,78,477	5,61,25,090	2,44,07,034	7·23	1,39,28,383	6,77,599	..	7·63	+97,68,706	619	56 51
1929-30	2,050·57	‡37,48,93,392	6,19,55,008	2,50,77,478	6·69	1,50,08,916 (f)	8,00,242(a)	5,71,539(a) (b)§	8·45	(f) 86,96,776(d)	582	59·52
1930-31	2,162·71	42,22,07,592	5,68,53,391	2,30,56,066	5·46	1,67,45,003	3,24,351(g)	69,462	5·27	+53,61,528	504	59·45
1931-32	2,194·97	42,60,68,866 (k m)	5,22,31,256	2,22,51,754 (l)	5·21	1,73,68,068	2,90,685(i) (n)	4,05,017(j) (o)	5·05	+41,40,182	452	57·40
1932-33	2,228·05	42,05,17,920	5,17,93,868	2,24,93,931	5·24	1,74,58,887	2,84,138 (q)	4,25,471 (r)	5·01	+43,25,435	441	56·57
1933-34	2,227·84	‖42,99,64,578 (k)	4,99,34,877	2,08,69,392	4·85	1,73,01,933	1,89,304 (u)	3,61,005 (v)	4·87	+30,17,150	424	58·21
1934-35	2,227·80	‖43,31,41,783 (l.k.)	5,10,02,528	2,14,06,756 (w)	4·94	1,69,05 626	2,62,198	4,00 088	4·86	+38,38,844	439	58·03
1935-36	2,233·48	‖43,52,99,415 (x k)	4,87,36,978	1,75,85,983 (y)	4·04	1,67,33,306	15,425	2,86,346 (z)	3·21	+5,50,906	418	63·92
1936-37	2,233·25	43,73,25.496 (k)	4,97,36,904	1,59,73,071	3·65	1,63,47,719	85,157	3,06,791 (z)	3·68	—7,65,506	398	67·88
1937-38	2,238·80	(k)43,85,05,773	5,17,85,783	1,70 98,265	3·90	1,62,93,350	1,45,188	3,35,856 (z)	4·08	+3,23 867	440	66·98
1938-39	2,233·05	44,10 42,777	5,04,58,801	1,54,33,060	3·50	1,62 70,121	33,623	2,87,848 (z)	3·34	—11,58,532	433	69·41

‡†Including premia paid by Government in the purchase of the line.

Includes the share of loss recoverable from the Company in working the British section of the Travancore railway.

§Includes Rs. 17,336 being the result of the revision of surplus profits statement from 31st March 1915 to 31st March 1919.

‖The amount of sterling liabilities involved in the purchase of railways included in the figures shown against 1933-34 and 1934-35 has been converted at the rates of exchange ruling at the time when the liabilities came into being as against the statutory rate of exchange—*i.e.*, 1*s* 6*d*. previously adopted

‖ From the year 1935-36 onwards the same amount has been reconverted at the latter rate.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(c) South Indian railway (3′ 3⅜″ gauge)—*contd.*

(*a*) Includes Rs. 2,14,771 being the arrears of Surplus profits for half years ended 30th September 1925 to 31st March 1929 (as per revised statements prepared in accordance with India Office letter No. F. 1021/30 of 1st April 1930).

	Rs.
(*b*) Amount payable to Salem District Board on their Capital merged in the undertaking	44,490
Less amount overpaid for 1928-29 now recovered as a result of the revision of the South Indian Railway Surplus profits statement *vide* India Office letter No. F. 1021/30 of 1st April 1930	88
	44,402

(*c*) Includes Rs. 2,63,000 being the guaranteed dividend for the year 1929-30 at 3½% per annum on the Tanjore District Board's Capital of Rs. 75,19,782 in the undertaking paid in 1929-30, *vide* Railway Board's telegram No. 2671-F. of 28th March 1930.

(*d*) Gain to the State on account of the South Indian Railway		96,62,379
Less Net loss to the State on account of the following lines, *i.e.*, interest on Capital Outlay in excess of Net Revenue		9,65,603
Loss in Shoranur-Nilambur Railway	3,60,559	
Loss in Trichy.-Manamadura Railway	3,44,555	
Loss in Salem-Attur-Vridhachalam Railway	2,05,828	
Loss in Pollachi-Palghat Railway	73,257	
Gain in Cuddalore-Vridhachalam Railway	16,903	
Gain in Salem-Mettur-Dam Railway	1,693	
Net Loss	9,65,603	
(*e*) (1) Salem		44,402 (*b*)
(2) Tanjore		5,27,137(*c*)

(*f*) Figures are subject to alteration.

(*g*) Represents net figure after deducting Rs. 68,776 being the surplus profits overpaid during the years 1925-26 to 1929-30, *vide* India Office letter No. F. 1021/30 of 1st April 1930 and Railway Board's letter No. 2578-F. of 28th June 1930.

(*h*) (*i*) Includes the arrears of Rs. 23 and 820 for the years 1928-29 and 1929-30 respectively due to Salem District Board on account of the revision of surplus profits of South Indian Railway for 1928-29 and 1929-30.

(*ii*) Includes the arrears of Rs. 752 due to Tanjore District Board on account of revision of surplus profits of South Indian Railway for 1929-30.

(*iii*) Includes Rs. 2,63,000 being the guaranteed dividend for the year 1930-31 at 3½ per cent. per annum on the Tanjore District Board's Capital of Rs. 75,19,782 in the undertaking paid in 1930-31, *vide* Railway Board's telegram No. 2671-F. of 28th March 1930.

		Rs.
Salem District Board for 1930-31		36,984
(1) Arrears of 1928-29		23
Arrears of 1929-30		820
		37,827
(2) Tanjore District Board for 1930-31		4,30,883
Ditto	1929-30	752
		4,31,635
	Total (1 and 2)	4,69,462

(*i*) Includes Rs. 31,494 being the arrears of surplus profits due to the South Indian Railway Company for half years ended 30th September 1923 to 31st March 1931, *vide* India Office letter No. F. 1021/30, dated 1st April 1930 and Railway Board's letters Nos. 2578/F. of 28th June 1930 and 22nd September 1931 and Nos. 5750/F. of 14th February 1930 and 1206/B. of 8th January 1932.

(*j*)(*i*) Includes Rs. 219 being the net arrears for the years 1928-29 to 1930-31, due to Salem District Board on account of the revision of South Indian Railway surplus profits statements for the years 1928-29 to 1930-31.

(*ii*) Includes Rs. 4,512 and Rs. 5,264 being the arrears for the years 1929-30 and 1930-31 respectively, due to Tanjore District Board on account of the revision of South Indian Railway Surplus profits statements for the years 1929-30 and 1930-31.

(*iii*) Includes Rs. 2,63,000 being the guaranteed dividend for the year 1931-32 at 3½ per cent. per annum on the Tanjore District Board's Capital of Rs. 75,19,782 in the undertaking paid in 1931-32, *vide* Railway Board's telegram No. 2671-F. of 28th March 1930.

(*k*) Excludes outlay on Subgrade work of the Mecheri-Mettur Dam Section of Salem-Mettur Dam Railway.

(*l*) Includes arrears of working Expenses charged to Shoranur-Nilambur and Salem-Mettur Dam Railways for the previous years as indicated in Railway Board's No. 5750-F. of 14th February 1930.

(*m*) The Capital outlay has been arrived at by adding the outlay of Rs. 25,49,054 incurred during 1932-33 to the figure, *viz.*, Rs. 42,69,68,866 advised by the Controller of Railway Accounts in his letter No. 727-St/C. R. A., dated the 20th January 1933.

(*n*) Includes Rs. 5,829 being the arrears of surplus profits due to the South Indian Railway Company for the half years ended 30th September 1927 to 31st March 1932, consequent on the settlement of the terms of working Shoranur-Nilambur, Cuddalore-Viddacalam and Salem-Mettur Dam Railways.

(*o*) (*i*) Includes Rs. 232 being the arrears for the years 1928-29 and 1931-32 due to the Salem District Board on account of the revision of South Indian Railway Surplus profits statements for the years 1927-28 to 1931-32.

(*ii*) Includes Rs. 16,397 being the arrears for the years 1929-30 to 1931-32 due to the Tanjore District Board on account of the revision of the South Indian Railway Surplus profits statements for these years and to the revision of Capital Outlay of the Tanjore District Board due to calculation of interest charges on funds provided by the District Board for Mayavaram-Tranquebar Railway to end of March 1929, instead of to end of March 1927.

(*iii*) Includes Rs. 2,63,000 being the guaranteed dividend for the year 1932-33 at 3½ per cent. per annum on the Tanjore District Board's Capital of Rs. 75,19,782 in the undertaking paid in 1932-33, *vide* Railway Board's telegram No. 2671-F. of 28th March 1930.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(*c*) South Indian railway (3′ 3⅜″ gauge)—*concld.*

(*q*) Includes Rs. 2,109 being the arrears of surplus profits due to the S. I. Railway Company consequent on the revision of the surplus profits statements for the half years ended 31st March 1928 to 31st March 1933 on account of the adjustment of the outlay on works carried out on New Constructions subsequent to their opening but before the closing of the construction estimates made as per Railway Board's letter No. 5713-F. dated the 23rd March 1933.

(*r*) (*i*) Includes Rs. 135 being the arrears for the years 1928-29 to 1932-33 due to the Salem District Board as a consequence of the revision of the S. I. Railway surplus profits statements for the half years ended 31st March 1928 to 31st March 1933.

(*ii*) Includes Rs. 1,945 being the arrears for the years 1929-30 to 1932-33 creditable to the Tanjore District Board on account of the revision of the S. I. Railway surplus profits statements for those years and also due to the revision of the capital outlay of the Tanjore District Board due to calculation of interest charges on funds provided by the Distict Board for Mayavaram Tranquebar Railway to end of March 1929, at the rates applicable to Secretary of State's advances to Railway Companies instead of at the average rates applicable to Finance Accounts, as per Railway Board's letter No. 2519-F. of 16th June 1933.

(*iii*) Includes Rs. 2,63,000 credited to the Tanjore District Board in 1933-34 on account of guaranteed interest for the year 1933-34 at 3½ per cent. per annum on the District Board's capital outlay merged in the undertaking as per Railway Board's telegram No. 2671-F. dated 28th March 1930.

(*t*) Includes a sum of Rs. 4,643 expended on the Construction of the Agastiyampalli Point Calimere Railway during 1934-35.

(*u*) Includes the sum of Rs. 7,196 being the arrears of surplus profits due to the South Indian Railway Company consequent on the revision of the surplus profits statements for the half years ended 31st March 1931 to 31st March 1934 on account of the adjustment of the differences the revaluation of second hand rails in the surplus profits statements.

(*v*) (*i*) Includes Rs. 309 and Rs. 3,642 being the arrears for the years 1930-31 to 1933-34 due to the Salem and Tanjore District Boards respectively, as a consequence of the revision of the South Indian Railway surplus profits statements for the half years ended 31st March 1931 to 31st March 1934.

and (*ii*) includes Rs. 2,65,716 credited in equal shares to the East and West Tanjore District Boards in 1934-35, on account of guaranteed interest for that year @ 3½ per cent. per annum on the Tanjore District Board's capital merged in the undertaking (as per Railway Board's telegram No. 2671-F., dated 28th March 1930).

(*w*) Represents the amounts arrived at after taking into accounts approximate amounts of Rs. 29,120 and Rs. 40,549 on account of appropriate share of Joint station expenses at Shoranur and Salem debitable to Shoranur-Nilambur and Salem Mettur Dam Railways respectively from the dates of their opening to end of March 1935.

(*x*) Includes a sum of Rs. 2,89,499 on Agastiyampalli-Point Calimere Extension opened for traffic on 28th January 1936.

(*y*) Excludes a credit of Rs. 20,376 being the 1/5th share of surplus profits of Shoranur-Cochin Railway credited to the head 'Payment to worked lines'.

(*z*) (*i*) Includes. Rs. 2,65,716 credited to the East and West Tanjore District Boards in each of the years 1935-36, 1936-37 and 1937-38 in the ratio of 44·2 and 55·8 on account of guaranteed interest for that year, at 3½ per cent. per annum on the Tanjore District Board's capital merged in the undertaking, *vide* Railway Board's telegram No. 2671-F., dated the 28th March 1930.

(*z*) (*ii*) Includes Rs. 2,65,716 credited to the Tanjare District Board in 1938-39 on account of guaranteed interest for that year at 3½ per cent. per annum on the Tanjore District Board Railway's Capital merged in the South Indian Railway Undertaking and (*ii*) Rs. 723 paid to the District Board and Rs. 61 paid to the Salem District Board during 1938-39.

(*d*) Nilgiri railway (3′ 3⅜″ gauge)—

The original Nilgiri Railway Company was registered on the 30th September 1885 with nominal capital of Rs. 25,00,000, and a contract was executed between the Secretary of State and that Company on the 26th February 1886. The original Company went into liquidation in April 1894 and a new Company was formed in February 1896 to purchase the line from the former Company and supply the capital required to complete it and to construct the proposed extension to Ootacamund. The line from Mettupalaiyam to Coonoor was completed by the new Company and opened for traffic on the 15th June 1899. On the offer of the new Company to sell the line it was purchased by the Government for £235,000 on the 1st January 1903. The extension to Ootacamund was constructed by the Government.

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4
Mettupalaiyam to Coonoor	15-6-99	16·99	
Coonoor to Fernhill	15-9-08	10·86	
Fernhill to Ootacamund	15-10-08	1·11	
TOTAL	..	..	28·96

Details of construction—

Permanent-way.—The permanent-way consists of flat footed steel rails. 50-lb. to the yard, laid on Wooden Sleeper except for 2½ miles (from mile H. 16 to H. 18½) near Coonoor, where it is British Standard 50 lbs. R. flat-bottomed Steel rails on wooden sleepers. Between Kallar and Coonoor (12 miles) there is also a central rack rail.

Ballast.— Rack section is ballasted with earth and moorum blinded with broken granite and the Adhesion section with broken granite.

Fencing.—The line is unfenced throughout.

Curves.—The sharpest curve is of 318 feet radius.

Gradients.—The ruling gradient is 1 in 12·28 on the Rack section and 23·81 on the Adhesion section.

Contracts—

The railway was worked by the former Madras Railway Company up to the 31st December 1907 on behalf of the Government. With effect from 1st January 1908, it was made over to the South Indian Railway Company as a part of the Jalarpet Mangalore section for working as an integral part of their undertaking in terms of the contract of 2nd March 1909 between the Secretary of State and the Company with the condition that the capital cost of the Coonoor-Ootacamund railway incurred either before or after 1st January 1908 should not be regarded as the capital of the Company but should be for the separate account of Government.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(*d*) Nilgiri railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working (Those for the periods prior to 1908 will be found in Appendix 38 to the Railway Administration Report for 1907).—

NOTE.—From the year 1936-37 the $\frac{\text{Net earnings}}{\text{Working Expenses}}$ have been arrived at after taking into account the Appropriation to Depreciation Reserve Fund instead of actual expenditure on 'Replacements and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1908 . .	28·96	67,82,028	3,36,030	42,991	0·63	223	87·21
1909 . .	28·96	70,32,241	4,08,791	53,657	0·76	271	84·87
1910 . .	28·96	75,94,023	4,57,097	72,441	0·95	304	84·15
1911 . .	28·96	77,29,506	4,94,851	1,24,632	1·61	329	74·81
1912 . .	28·96	78,32,496	5,21,687	1,16,443	1·49	346	77·68
1st qr. of 1913	28·96	78,84,535	1,25,409	25,923	0·33	333	79·33
1913-14 .	28·96	81,18,956	5,38,969	98,376	1·21	357	81·75
1914-15 .	28·96	82,82,093	5,74,861	23,957	0·29	382	95·83
1915-16 .	28·96	83,64,280	6,95,971	89,920	1·08	462	87·08
1916-17	28·96	83,89,102	7,79,928	2,69,516	3·21	518	65·44
1917-18 .	28·96	83,95,163	9,03,235	3,35,878	4·00	600	62·81
1918-19 .	28·96	84,06,742	8,70,975	2,86,983	3·41	578	67·05
1919-20 .	28·96	85,12,895	8,13,843	91,978	1·08	544	88·77
1920-21 .	28·96	91,00,987	8,70,479	1,35,743	1·49	578	84·41
1921-22 .	28·96	95,50,863	9,12,769	—11,910	..	606	101·30
1922-23 .	28·96	96,22,269	10,38,636	2,27,180	2·36	690	78·13
1923-24 .	28·96	95,81,139	10,22,564	3,50,462	3·66	679	65·72
1924-25 .	28·96	93,37,633	9,66,466	3,41,695	3·66	642	64·65
1925-26 .	28·96	94,54,941	9,26,703	61,981	0·66	615	93·31
1926-27 .	28·96	96,04,555	10,27,872	3,57,845	3·73	683	65·18
1927-28 .	28·96	93,02,714	10,78,726	51,613	0·55	716	95·22
1928-29 .	28·96	93,31,949	8,32,095	85,425	0·91	553	89·73
1929-30 .	28·96	93,98,381	9,97,005	2,05,168	2·18	662	79·42
1930-31 .	28·96	95,16,415	6,06,511	—4,04,693	..	402	166·72
1931-32 .	28·96	95,72,994	7,76,122	1,99,395	2·08	513	74·31
1932-33 .	28·96	95,63,467	6,50,243	84,368	0·88	431	87·03
1933-34 .	28·96	95,44,547	6,03,574	—51 320	..	400	108·50
1934-35 .	28·96	95,47,429	6,86,791	67,268	0·70	455	90·21
1935-36 .	28·96	95,41,337	6,65,811	—78,899	..	440	111·85
1936-37 .	28·96	95,24,765	6,43,032	—1,15,305	..	426	117·93
1937-38 .	28·96	95,15,013	6,28,285	—1,01,447	..	416	116·15
1938-39*							

* Included in the figures for South Indian Rly. (3′ 3½ guage).

(*e*) Peralam-Karaikkal railway (3′ 3⅜″ gauge)—

The line is partly in British and partly in French territory and was constructed by the agency of the South Indian Railway Company with the object of placing the town and port of Karaikkal in communication with the railway system of Southern India.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Peralam to Karaikkal	14-3-98	14·65	14·65

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails laid on wooden and steel transverse sleepers

Ballast.—The line is ballasted with laterite.

Fencing.—The line is fenced only at stations

Curves.—The sharpest curve is of 1432 feet radius.

Gradients.—The ruling gradient is 1 in 250

Contract—

Dated the 27th March 1902, *between the Government of the French Settlements in India and the South Indian Railway Company*, for the working of the Peralam-Karaikkal railway.

Letter No. 88, dated the 19th February 1913, from the Government of French Settlements in India regarding the adoption of the Government financial year for the preparation of accounts.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(e) Peralam-Karaikkal railway (3′ 3⅜″ gauge)—*concld.*

Main provisions of contracts—

(i) *Land.*—In French territory provided by the Colonial (French) Government free of cost but subject to a land tax as for private property : in British territory by the British Government free of cost on condition that the proprietary rights remain vested in the British Government.

(ii) *Government aid.*—The railway was constructed at cost price by the South Indian Railway Company at the request and on behalf of the Colonial (French) Government, and is worked and maintained by the Company who provide the rolling-stock required for the traffic of the Peralam-Karaikkal Railway.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } Direction, maintenance and working expenses, excluding the cost of repairing damages due to any extraordinary casualty and new minor works not costing more than Rs. 1,000 on the system, are calculated at the same proportion of the gross receipts of the Peralam-Karaikkal railway as obtains half-yearly on the Company's system, including worked lines, as a whole, *plus* the cost of repairing damages due to any extraordinary casualty and of New Minor Works on the branch, 5 per cent. of the gross receipts of the Branch for the use of the Company's rolling-stock and 5 per cent. per annum for interest on Rs. 30,000 which is taken as representing the Branch line's share of the Company's outlay on revenue and other stores and workshop buildings and machinery.

The " net receipts " so arrived at are paid every half-year to the Colonial (French) Government :

Provided always that if, at any time, the working of the Peralam-Karaikkal railway involve an actual loss to the Company, the Colonial (French) Government shall make good such loss.

(v) *Rates and fares.*—To be agreed to between the Company and the Colonial (French) Government but should not be less than the minima actually in force on the Company's undertaking.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Not specified.

(vii) *Power of Colonial (French) Government to determine contract.*—
(viii) *Power of the Company to determine contract.*— } Determinable by either party on giving to the other 12 months' previous notice expiring on the 30th June or 31st December in any year.

(ix) *Term of contract, if not determined under* (vii) *or* (viii).—Not specified.

Statistics of working (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14).—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportions of expenses to earning.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	14·65	7,23,786	63,513	21,393	2·96	83	66·32
1914-15	14·65	7,23,786	66,464	20,041	2·77	87	69·85
1915-16	14·65	7,23,786	65,771	23,026	3·18	86	64·92
1916-17	14·65	7,23,786	64,917	23,187	3·06	85	65·85
1917-18	14·65	7,23,786	64,309	21,584	2·98	84	66·44
1918-19	14·65	7,23,786	58,022	7,675	1·06	76	86·77
1919-20	14·65	7,23,786	69,185	17,991	2·49	91	74·00
1920-21	14·65	7,23,786	99,470	—23,007	..	131	123·22
1921-22	14·65	7,23,786	1,09,915	—7,990	..	144	107·27
1922-23	14·65	7,23,786	1,10,287	10,335	1·43	145	90·63
1923-24	14·65	7,23,786	1,09,768	15,702	2·17	144	85·69
1924-25	14·65	,23,786	1,02,097	8,043	1·11	134	92·12
1925-26	14·65	7,23,786	99,531	4,139	0·57	131	95·85
1926-27	14·65	7,23,786	1,13,624	16,926	2·34	149	85·10
1927-28	14·65	7,25,070	1,19,982	18,400	2·54	158	84·66
1928-29	14·65	7,25,072	1,06,853	26,906	3·71	140	74·82
1929-30	14·65	7,25,072	1,23,169	16,171	2·23	162	86·87
1930-31	14·65	7,26,266	1,21,848	11,426	1·57	160	90·62
1931-32	14·65	7,25,512	96,272	33,037	4·55	126	65·68
1932-33	14·65	7,25,938	97,383	(*a*)6,164	0·85	127	93·67
1933-34	14·65	7,26,656	95,517	17,788	2·45	125	81·38
1934-35	14·65	7,26,656	92,233	31,614	4·35	121	65·72
1935-36	14·65	7,26,703	78,540	9,211	1·27	103	88·27
1936-37	14·65	7,26,660	86,762	2,567	0·35	114	97·04
1937-38	14·65	7,26,349	86,747	13,750	1·89	114	84·15
1938-39	14·65	7,27,624	61,980	5,518	0·76	81	91·10

(*a*) Represents net earnings less arrears of working expenses for 1930-31 and 1931-32.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(*f*) Podanur-Pollachi railway (3′ 3⅜″ gauge)—

The construction of this line by the South Indian Railway Company from funds to be provided by the District Board of Coimbatore was authorised in Railway Board's telegram No. 470-R.P., dated the 19th November 1913.

Progress in opening—

Section of railway. 1	Date of opening. 2	Miles. 3	Total. 4
Podanur to Pollachi	15-10-15	25·04	25·04

Details of construction—

Permanent-way.—The line is laid with 41¼-lb. flat-footed steel rails on hardwood (irool) and second class steel transverse sleepers.

Ballast.—The line is ballasted with moorum, except for 6 miles where field stones and kunkur are used.

Fencing.—Only the Pollachi station yard is fenced.

Curves.—The sharpest curve is of 955 feet.

Gradients.—The ruling gradient is 1 in 70.

Agreement—
Main provisions of agreement— } The line was constructed and is being maintained and worked under the terms of an agreement which is under consideration.

Statistics of working—

Year. 1	Mileage open at end of each year. 2	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction. 3	Gross earnings. 4	Net earnings. 5	Percentage of net earnings on total capital outlay given in column (3). 6	Earnings per mile per week. 7	Proportion of expenses to earnings. 8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1915-16 . .	25·04	11,09,181	63,702	34,178	3 08	106	46·35
1916-17 . .	25·04	10,48,834	1,60,792	81,972	7·82	123	49·02
1917-18 .	25·04	11,37,252	1,80,127	94,319	8·29	138	47·64
1918-19	25·04	11,39,028	1,93,123	1,01,579	8·92	148	47·40
1919-20 .	25·04	11,39,026	2,51,144	1,32,868	11·67	193	47·09
1920-21 .	25·04	11,51,770	2,72,431	1,49,813	13·01	209	45·01
1921-22 . .	25 04	12,82,981	2,95,812	1,58,413	12·35	227	46·45
1922-23 . .	25·04	13,85.426	3,51,665	1,89,138	13·65	270	46·22
1923-24 . .	25·04	13,97,363	3,92,302	1,81,387	12·98	301	53·76
1924-25 . .	25·04	16,68 371	4,15,989	2,15,865	12·94	319	48·11
1925-26 . .	25·04	16,73,924	4,85,077	2,21,513	13·23	373	54·33
8926-27 . .	25·04	17,17,326	4,91,972	2,06,553	12·02	378	55·01
1927-28 . .	25·04	17,28,405	5,35,439	2,02,124	11·69	411	62·25
1928-29 . .	25·04	17,32,077	5,31,275	1,97,327	11·39	408	62·86
1929-30 . .	25·04	17,58,931	4,79,063	1,84,639	10·50	368	61·46
1930-31 .	25·04	17,71,469	3,49,384	1,29,687	7·32	268	62·88
1931-32 . .	25·04	17,84,205	3,10,900	1,26,824	7·11	237	59·21
1932-33 . .	25·04	17,84,066	(*a*)5,23,221	1,85,543	10·40	401	64·54
1933-34 .	25·04	17,85,279	2,46,820	1,31,905	7·39	189	46·56
1934-35 . .	25·04	16,99,385	2,51,614	(*b*)1,03,825	6·11	193	58·74
1935-36 .	25·04	15,24,413	2,01,048	65,003	4·26	154	67·67
1936-37 .	25·04	15,06,312	1,88,614	58,376	3·88	145	69·05
1937-38 . .	25·04	15,04,006	2,16,445	68,451	4·55	166	68·37
1938-39 . .	25·04	15,04,695	2,18,469	66,345	4·41	167	69·63

(*a*) Include the earnings due to Podanur-Pollachi Railway in respect of traffic originating or terminating between Dindigul (inclusive) and Pollachi (exclusive) sections and passing *viz.*, Podanur-Pollachi Railway credited to South Indian Railway in previous years and adjusted in 1932-33.

(*b*) Arrived at after taking into account the adjustment in the year of Rs. 5,058 by credit to the District Board on account of South Indian Railway, proportionate interest charges on Pollachi joint station from the date of opening of Dindigul Pollachi Railway, *viz.*, 19th November 1928 to end of March 1935.

(*g*) Pondicherry railway (3′ 3⅜″ gauge)—

The line is in the French territory and was constructed (by the Pondicherry Railway Company under the supervision of the South Indian Railway Company) with the object of placing the town and port of Pondicherry in communication with the railway system of Southern India and of developing the resources of the territory.

Progress in opening—

Section of railway. 1	Date of opening. 2	Miles. 3	Total. 4
East bank of the Gingee river to Pondicherry	15-12-79	7·85	7·85

Details of construction—

Permanent-way.—The line is laid with British Standard 50 lbs. R flat-bottomed steel rails on wooden sleepers, except for ½ mile (from Gingee river to mile P. 118) where 50-lb. bull-headed steel rails are laid on cast iron pot sleepers.

Ballast.—The line is ballasted with stone.

Fencing.—The line is fenced.

Curves.—The sharpest curve is of 1,320 between Villupuram and Pondicherry and 495 feet radius in the pier siding.

Gradients.—The ruling gradient is 1 in 200.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(*g*) **Pondicherry railway** (3′ 3⅜″ gauge)—*concld.*

Agreement and contract—

Agreement, dated the 30th December 1890, *between the South Indian Railway Company and the Pondicherry Railway Company*, for maintenance and working.

Despatch from the Secretary of State, No. 19-Ry. dated the 17th March 1895, intimating the renewal of the agreement by the parties thereto.

Contract, dated the 23rd April 1914 (supplemental to the principal contract of 1890), *between the Secretary of State and the South Indian Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

Main provisions of agreement and contract—

(i) *Land.*—Not specified.

(ii) *Government aid.*—The railway (which was constructed by the Pondicherry Railway Company) is maintained, worked and provided with rolling-stock by the South Indian Railway Company as an integral part of their undertaking—except only as to such works required for the accommodation and extension of traffic on the Pondicherry line which the Pondicherry Railway Company would have had to construct had they been themselves working their own line, which the latter undertake to make at their own cost to the satisfaction of the South Indian Railway Company.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } Maintenance and working expenses are charged for at the same percentage of the gross receipts of the Pondicherry railway as obtains on the South Indian Railway Company's undertaking including the Pondicherry line—duty, if any, payable to the Colonial (French) Government and direction and office expenses in England being excluded from the calculation. The balance is payable half-yearly to the Pondicherry Railway Company.

(v) *Rates and fares.*—
(vi) *Special obligations as to the conveyance of*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } To correspond with those for the time being in force on the South Indian Railway Company's undertaking.

(vii) *Power of the Government to determine agreement.*—The agreement terminates upon the determination by Government of the South Indian Railway Company's principal contract with the Secretary of State, dated the 24th November 1890, *vide* (vii) under South Indian railway (3′ 3⅜″ gauge).

(viii) *Power of the South Indian Railway Company to determine agreement.*—
(ix) *Power of the Pondicherry Railway Company to determine agreement.*— } The agreement is terminable by either party on 6 months' notice given expiring on the 31st December in any year, subject to (vii).

(x) *Term of agreement.*—The agreement was originally for a term of 3 years, but it has since been renewed subject only to (vii), (viii) and (ix).

Statistics of working (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14).—

Year.	Mileage open at end of each year.	Total capital outlay, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14 . .	7·85	5,68,543	1,56,981	63,016	11·08	385	59·86
1914-15 . .	7·85	5,68,543	1,02,839	41,650	7·33	252	59·50
1915-16 . .	7·85	5,68,543	1,06,176	52,675	9·26	260	50·39
1916-17 . .	7·85	5,68,543	96,434	47,389	8·34	236	50·86
1917-18 . .	7·85	5,68,543	96,111	54,415	9·57	235	43·38
1918-19 . .	7·85	5,68,543	1,19,421	63,639	11·19	293	46·71
1919-20 . .	7·85	5,68,543	1,56,068	69,910	12·30	382	55·20
1920-21 . .	7·85	5,68,543	1,43,588	55,303	9·73	352	61·48
1921-22 . .	7·85	5,68,543	1,67,666	45,127	7·94	411	73·09
1922-23 . .	7·85	5,68,543	1,68,835	49,306	8·67	414	70·80
1923-24 . .	7·85	5,68,543	1,84,160	78,157	13·75	451	57·56
1924-25 . .	7·85	5,71,222	1,83,086	81,093	14·20	449	55·71
1925-26 . .	7·85	5,71,758	1,92,869	76,266	13·34	472	60·46
1926-27 . .	7·85	5,71,758	2,06,802	91,535	16·01	507	55·74
1927-28 . .	7·85	5,71,758	1,99,580	75,776	13·25	489	62·03
1928-29 . .	7·85	5,72,481	2,14,991	91,835	16·04	527	57·29
1929-30 . .	7·85	5,72,586	2,27,418	89,532	15·64	557	60·63
1930-31 . .	7·85	5,72,744	1,92,922	74,586	13·02	471	61·34
1931-32 . .	7·85	5,72,744	1,05,655	43,008	7·51	257	59·22
1932-33 . .	7·85	5,72,838	1,13,490	49,005	8·55	277	56·89
1933-34 . .	7·85	5,72,854	1,25,247	51,792	9·04	306	58·65
1934-35 . .	7·85	5,72,854	1,30,887	53,080	9·27	320	59·45
1935-36 . .	7·85	5,72,854	1,23,246	42,400	7·40	300	65·60
1936-37 . .	7·85	5,88,030	1,59,637	58,630	9·97	390	63·27
1937-38 . .	7·85	6,14,527	1,26,166	45,609	7·42	308	63·85
1938-39 . .	7·85	6,12,263	98,752	35,390	5·78	241	64·16

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(*h*) Tinnevelly-Tiruchendur railway (3′ 3¾″ gauge)—

Sanction to the construction of this line by the South Indian Railway Company on behalf of the District Board of Tinnevelly was conveyed in Railway Board's Notification No. 211, dated the 16th July 1915.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tinnevelly to Tiruchendur . . .	24-2-23	38·18	38·18

Details of construction—

Permanent-way.—The permanent-way consists of 40-lb. British standard section flat-footed steel rails laid on hard-wood cross sleepers.

Ballast.—The line is ballasted with moorum for 28 miles and with sand for the rest.

Fencing.—The line is fenced only at stations

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Agreement—

Main provisions of agreement—

} The line was constructed and is being maintained and worked under the terms of an agreement which is under consideration.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of the year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week	Proportion of expenses to earnings
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1922-23 .	38·18	20,78,891	40,097	20,048	0·96	205	50·00
1923-24 . .	38·18	24,51,318	4,32,387	2,09,193	8·53	218	51·62
1924-25 . .	38·18	25,51,567	5,11,535	2,44,873	9·60	258	52·13
1925-26 .	38·18	24,92,622	5,32,611	2,54,605	10·19	268	52·31
1926-27 . .	38·18	25,35,414	5,19,423	2,42,042	9·55	262	53·40
1927-28 . .	38·18	25,97,414	4,99,641	2,31,930	8·93	252	53·58
1928-29 . .	38·18	26,10,722	4,87,702	2,25,691	8·64	246	53·72
1929-30 . .	38·18	26,51,994	4,99,673	2,31,353	8·72	252	53·69
1930-31 . .	38·18	26,74,246	4,75,643	2,18,411	8·17	239	54·08
1931-32 . .	38·18	26,87,852	3,89,613	1,69,218	6·30	195	56·57
1932-33 . .	38·18	27,03,384	4,19,336	1,89,221	7·00	211	54·88
1933-34 . .	38·18	27,05,345	3,92,562	(*a*) 1,45,965	5·40	197	62·82
1934-35 . .	38·18	27,04,969	3,48,642	1,42,452	5·27	175	59·14
1935-36 . .	38·18	27,05,219	3,10,425	97,923	3·62	156	68·46
1936-37 . .	38·18	27,10,877	3,60,580	90,466	3·34	181	74·91
1937-38 . .	38·18	27,10,904	4,34,333	1,14,758	4·23	218	73·58
1938-39 . .	38·18	27,15,059	4,25,836	1,36,782	5·04	214	67·88

(*a*) Represents the amount arrived at after taking into account, the difference in working expenses between 50% and 45% of the gross earnings previously recovered for the period from 1-10-1930 to 31-3-1933, and of readjustment of joint station expenses from the date of opening of Tinevelly-Tiruchendur Rly. in accordance with the revised terms for working the line.

(*i*) Travancore railway (British section) (3′ 3¾″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tinnevelly to Kallidaikurichi	1-6-02	19·14	
Kallidaikurichi to the British frontier near Shencottah .	1-8-03	31·19	
TOTAL .	..	..	50·33

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(i) Travancore railway (British section) (3′ 3⅜″ gauge)—*contd.*

Details of construction—

Permanent-way.—The line is laid with 50-lb. bull-headed steel rails on cast iron pots and 56-lb. flat-footed steel rails on wooden sleepers over bridges

Ballast.—The line is ballasted throughout with broken stone.

Fencing.—The line is fenced at stations and at a few places where it runs close to villages and public roads.

Curves.—The sharpest curve is of 1,432·5 feet radius.

Gradients.—The ruling gradient is 1 in 100.

Contracts—

Dated the 27th June 1901 (known as the " Travancore contract " and supplemental to the principal contract of 1890), *between the Secretary of State and the South Indian Railway Company*, as to the construction, maintenance and working of the Travancore Branch.

Dated the 21st December 1910 (supplemental to the contracts of 1890 and 1901), *between the Secretary of State and the South Indian Railway Company*, modifying the contract of 1901.

Dated the 2nd October 1913 (known as the Quilon-Trivandrum extension contract and supplemental to the contracts of 1890, 1901 and 1910), *between the Secretary of State and the South Indian Railway Company*, as to the construction and working of the extension to Trivandrum.

Dated the 23rd April 1914 (supplemental to the contracts of 1890, 1901 and 1910), *between the Secretary of State and the South Indian Railway Company*, as to the adoption of the Government financial year for the preparation of accounts.

Main provisions of contracts—

(i) *Land.*—
(ii) *Government aid.*— } As under South Indian railway (3′ 3⅜″ gauge).

(iii) *Terms and working.*—
(iv) *Distribution of profits.* } The line is worked by the South Indian Railway Company at the same proportion of its gross earnings of each half year as obtains on the whole of the South Indian Railway undertaking including the Travancore Railway. The net revenue receipts of the half year so arrived at, are then applied in the following manner and order :—

1. In payment to the Secretary of State of interest,

(*a*) on debentures and debenture stock issued for purposes of the Travancore Branch, *i.e.*, British and Indian State Sections, the line from Tinnevelly to Quilon ;

(*b*) on moneys advanced by him under clause 7 of the Travancore Contract to meet the capital expenditure on the British (Tinnevelly-Shencottah) and Indian State (Shencottah-Quilon) Sections.

Note—The rate of interest to be charged on the Secretary of State's advances made for the discharge of Travancore Railway Debentures *viz.* £ 75,000 and £50,000 on the 3rd July 1924 and 3rd January 1926 respectively should be 5½ per cent. per annum (India Office letter No. P. W. 2616/26, dated 12th August 1926). Interest at 3½ per cent. per annum on the rupee equivalent of advances made for the discharge of debentures amounting to £338,500 on 15th August 1937 is charged as per the decision of the India Office, from 16th August 1937.

2. If the net revenue receipts are insufficient to meet the interest charges on the British and Indian State Sections referred to above, the deficiency is apportioned between the British Section and the Indian State Section including Quilon-Trivandrum Extension (section lying within the Indian State Territory) in proportion to the capital cost of these sections. The loss pertaining to the British Section is further distributed between the Secretary of State and the South Indian Railway Company in proportion to their respective profit sharing capital in the South Indian Railway undertaking for the half year. The Company's share of any such deficiency for a half year may be deducted by the Secretary of State from any moneys due to the Company for the two halves of the year taken together under Clause 60 of the Principal Contract.

As between the Secretary of State and the Travancore Durbar, the latter has underwritten the guarantee of Interest liability to the extent of the capital cost of the Indian State Section (Shencottah-Quilon Section) therefore the loss pertaining to the Indian State Section is borne by the Travancore Durbar. The loss was, upto 31st March 1931, recovered from the Travancore Government half yearly. With effect from 1st April 1931, the loss is recovered from the Travancore Government half yearly without taking into account the capital outlay of the Quilon-Trivandrum Extension.

With effect from 1st April 1937 the loss is recovered from the Travancore Government annually, without taking into account the capital outlay of the Quilon-Trivandrum Extension.

3. Any balance after meeting the interest charges referred to above, is utilised towards the payment of interest charges on the capital outlay of Quilon-Trivandrum extension at 4 per cent. per annum. If the balance is not sufficient to meet the interest charges in full, the amount available is paid to the Durbar. With effect from 1st April 1937 the calculations are made annually and payment is made to the Travancore Government.

If, however, the net revenue receipts are in excess of the interest charges on the capital outlay of the British and Indian State Sections and Quilon-Trivandrum Extension, the residue is termed " Surplus Profits ".

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(i) Travancore railway (British section) (3′ 3⅜″ gauge)—*concld.*

Main provisions of contract—*contd.*

The Surplus Profits so arrived at, as above, after meeting interest charges on British and Indian State Sections and Quilon-Trivandrum Extension, shall in the first instance, be apportioned between the Secretary of State and the South Indian Railway Company, in proportion to their profit-sharing capital in the South Indian Railway Undertaking at end of the half year. The share of the Secretary of State is divided between the Secretary of State and the Durbar in proportion to the mileages of the British Section (Tinnevelly-Shencottah) and Indian State Section including Quilon-Trivandrum Extension (Shencottah to Trivendrum Section lying within the State) and the proportion pertaining to the Section within the State is credited to the Durbar. The amount due to the Travancore Government is calculated annually with effect from 1st April 1937.

4. The terms for working Chakai-Thambanur Extension are under consideration and pending their settlement, the net earnings of the extension provisionally apportioned on mileage basis between the Travancore Railway (Tinnevelly-Trivandrum Section) and the additional length due to the opening of the extension, less 5 per cent. of the earnings recoverable on account of hire of Rolling Stock, are being credited to Travancore Durbar towards interest on capital outlay spent by them on the extension. Pending the final approval of the Government of India, the Chakai-Thambanur Extension is worked as part of the Quilon-Trivandrum Extension under the existing Travancore Contract from the date of opening of the Chakai-Thambanur Extension.

(v) *Rates and fares—*
(vi) *Special obligations as to the conveyance of—*
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin and the persons in charge thereof.—
} As under South Indian railway (3′ 3⅜″ gauge).

(vii) *Services for any Department of the Travancore Durbar.—*
(viii) *Power of the Government to determine contract.—*
(ix) *Power of the Company to surrender contract.—*
(x) *Term of contract.—*
} As under South Indian railway (3′ 3⅜″ gauge).

Statistics of working—

NOTE.—From the year 1936-37 the net earnings/working expenses of British section, have been arrived at after taking into account the 'Appropriation' to Depreciation Reserve Fund' instead of actual expenditure on 'Replacements and Renewals' previously accounted for.

Year.	Mileage open at end of each year.		Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.		Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in columns (4) and (5).	Interest charges.		Gain or loss *pertaining to each year.*			Earnings per mile per week.	Proportion of expenses to earnings.
										British Section.				
	British section.	Indian State section.	British section.	Indian State section.				British section.	Indian State section.	South Indian Railway Company.	State.	Indian State section.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Miles.	Miles.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1902	19·05	..	31,64,655	75,81,838	47,210	26,039	0·24	1,15,306	2,30,014	..	—89,267	—2,30,014	81	44·84
1903	49·50	0·43	38,46,008	1,01,18,508	1,68,379	99,038	0·71	1,21,989	3,14,967	—15,596	—80,817	—2,41,505	101	41·14
1904	50·40	57·98	40,40,486	1,15,98,498	3,05,764	1,49,690	0·96	1,39,945	3,95,455	—16,145	—91,408	—2,78,157	85	51·08
1905	50·48	57·98	43,40,925	1,1784,078	4,86,757	2,49,307	1·55	1,44,178	3,32,112	—13,234	+5,088*	—2,18,787	86	48·78
1906	50·48	57·98	43,62,235	1,18,26,747	4,97,643	2,22,479	1·37	1,45,163	3,86,240	—13,939	—56,715	—2,38,270	88	55·29
1907	50·48	57·98	43,86,635	1,18,07,091	5,97,098	3,04,860	1·88	1,50,213	3,97,953	—10,269	—54,916	—1,78,121	106	48·91
1908	50·48	57·98	43,89,979	1,17,98,653	6,42,077	2,93,380	1·81	1,51,598	3,99,756	—10,481	—59,438	—1,88,055	114	54·30
1909	50·41	58·05	43,93,309	1,17,97,245	6,50,948	2,95,529	1·83	1,44,338	3,85,580	—9,034	—54,383	—1,70,972	115	54·64
1910	50·41	58·05	44,22,418	1,18,26,000	6,80,080	3,04,058	1·88	1,45,069	3,86,342	—8,351	—52,836	—1,65,556	121	55·27
1911	50·41	58·05	44,40,594	1,18,24,590	7,66,515	3,47,453	2·14	1,48,395	3,99,802	—3,904	—50,747	—1,46,093	130	54·68
1912	50·41	58·05	44,20,640	1,18,18,994	8,15,945	3,85,321	2·37	1,48,147	4,00,801	—3,119	—40,957	—1,19,551	145	52·79
1st qr. of 1913	50·41	58·05	44,19,271	1,18,22,921	1,19,831	78,657	0·45	37,049	1,00,191	—1,191	—16,058	—46,333	136	61·60
1913-14	50·41	58·05	44,19,508	1,18,74,340	9,03,390	3,55,800	2·18	1,18,201	3,31,151	—3,606	—21,821	—68,125	160	60·62
1914-15	50·41	58·05	43,62,872	1,27,03,873	8,92,082	2,65,752	1·58	1,48,458	4,03,606	—5,561	—67,837	—2,12,914	158	70·21
1915-16	50·41	58·05	43,52,433	1,45,43,178	9,85,938	4,01,070	2·12	1,53,758	4,15,849	—3,404	—32,181	—1,32,862	175	59·32
1916-17	50·41	58·05	43,72,052	1,53,72,846	10,27,354	4,18,755	2·12	1,88,565	5,35,782	—6,441	—54,800	—2,44,350	182	59·24
1917-18	50·41	95·96	43,68,451	1,67,41,762	11,46,203	4,77,362	2·26	2,52,310	6,47,573	—4,878	—2,32 476	—1,85,267	187	58·35
1918-19	50·41	95·96	43,67,536	1,68,15,180	15,11,462	8,05,578	3·80	1,67,778	4,78,755	..	..	+1,50,045*	199	46·70
1919-20	50·41	95·96	43,67,890	1,70,36,807	18,44,613	7,40,050	3·46	1,55,859	4,27,225	+400	+5,142	+1,52,024*	242	59·35
1920-21	50·41	95·96	43,67,521	1,70,60,199	20,13,281	7,31,932	3·42	1,47,757	3,86,670	+6,679	+85,645	+1,05,181	265	62·64
1921-22	50·41	95·96	43,72,749	1,84,49,483	21,29,725	5,35,517	2·35	2,55,819	7,15,101	—2,502	—2,78,931	—1,53,970	280	74·86
1922-23	50·41	95·96	44,07,126	1,85,98,416	21,65,718	5,84,052	2·54	2,40,366	7,36,151	—2,428	—2,31,197	—1,58,845	285	73·04
1923-24	50·41	95·96	44,53,692	1,88,64,657	21,52,445	7,28,548	3·12	2,28,248	6,92,963	+1,302	—2,33,450	+39,485	283	66·15
1924-25	50·41	95·96	46,16,475	1,90,16,454	20,61,972	9,08,816	3·85	2,20,387	6,38,312	3,803	—2,01,141	+2,46,975	271	55·92
1925-26	50·41	95·96	51,28,024	1,90,02,760	20,67,132	8,40,537	3·48	2,52,157	6,60,267	5,718	—2,41,122	+1,63,480	272	59·34
1926-27	50·41	95·96	50,56,866	1,91,14,407	21,42,174	9,60,442	3·97	2,50,945	6,37,505	3,140	—1,47,160	+2,16,012	281	55·17
1927-28	50·42	95·96	30,99,875	1,92,17,351	21,06,786	7,95,300	3·27	2,51,673	6,58,587	—133	—1,99,187	+84,360	277	62·25
1928-29	50·42	95·96	52,55,292	1,92,20,020	19,12,839	7,99,135	3·26	2,70,775	7,02,374	..	—2,36,269	+62,255	251	58·22
1929-30	50·42	95·96	53,70,252	1,92,27,042	20,50,787	7,25,249	2·95	2,64,522	6,73,303	—349	—2,01,620	—10,607	269	64·63
1930-31	50·42	95·96	54,42,007	1,92,42,066	19,11,709	7,51,610	3·04	2,86,630	7,08,379	—1,097	—1,76,654	65,648	250	60·68
1931-32	51·17	97·97	54,49,844	(*a*)2,13,49,198	(*b*)17,04,815	(*b*)6,78,789	2·53	2,90,105	7,22,617	—1,261	—2,60,261	—72,411	221	60·18
1932-33	50·33	97·64	54,52,824	2,18,21,156	16,79,871	7,20,366	2·64	2,88,948	7,31,826	—1,046	—2,43,308	—56,054	218	57·12
1933-34	50·33	97·64	54,52,113	2,18,34,931	17,64,974	7,08,428	2·60	2,73,848	6,65,074	—177	—2,30,058	—259	229	59·86
1934-35	50·33	97·64	54,61,249	2,19,32,258	17,42,052	7,06,246	2·58	2,53,571	5,87,636	—464	—1,21,867	—12,630	226	59·46
1935-36	50·33	97·64	54,65,155	2,19,26,765	15,87,497	5,51,544	2·01	2,47,248	5,74,793	—1,445	—1,85,364	—88,688	205	65·26
1936-37	50·33	97·64	54,90,700	2,20,26,024	15,69,357	5,69,871	2·07	2,38,158	5,56,027	—1,192	—1,53,470	—69,652	203	63·69
1937-38	50·33	97·64	52,67,629	2,05,13,881	16,64,605	6,14,136	2·30	2,42,808	5,85,375	—1,114	—1,85,111	(*c*)—27,822	216	63·11
1938-39	50·33	97·64	52,78,285	2,05,32,304	17,23,847	6,12,134	2·37	2,47,119	6,12,649	—982	—2,07,556	(*d*)—39,096	223	64·49

(*a*) Includes Rs. 21,20,197, the capital outlay on Chakai-Thambanur Extension.
(*b*) Include the figures relating to Chakai—Thambanur Extension opened for traffic on 4th November 1931.
(*c*) Includes Rs. 15,052 representing loss recovered in excess in previous years refunded to the Travancore Government in 1937-38 consequent on the revised method of apportiontment of loss between the Secretary of State and the Travancore Government.
(*d*) Includes Rs. 13,092 representing loss recovered in excess in previous years refunded to the Travancore Government in 1938-39 consequent on the revised method of apportionment of loss as between the Government of India and the Travancore Government, vide Railway Board's letter No. 7970-F., dated 14th July 1938.
*Due to abnormal increase in net earnings.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(*j*) Travancore railway (Indian State section) (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
From British frontier near Shencottah to Punalur	26-11-04	29·43	..	..
Punalur to Quilon	1-6-04	28·28	..	..
Quilon to Chakai	1-1-18	36·51	..	..
Chakai to Trivandrum Central	4-11-31	3·42	97·64	..
Grand total	..	..	..	97·64

Details of construction—

Permanent way.—The line from the frontier up to Quilon, is laid with 50 lb. bull-headed rails on cast iron pot sleepers except for a length of 22·50 miles, between Bhaghavathipuram and Punalur where there are Wooden sleepers of jarrah, irool and teak. The line between Quilon and Chakai is laid with 35 lb. flat footed Steel rails on hard wood sleepers. From Chakai to Trivandrum Central, it is laid with B.S. 50 lb. ' R ' flat bottomed steel rails on wooden sleepers.

Ballast.—The line is ballasted with granite, laterite, Screened gravel and laterite blinded with granite.

Fencing.—Only the main line is fenced at stations and at a few places where it runs close to village and public roads.

Curves.—The sharpest curve is of 477 feet radius.

Gradients.—The ruling gradient between Trivandrum Central and Punalur is 1 in 100 and between Punalur and Shencottah 1 in 50.

Contracts—

See under British section.

Statistics of working—

See under British section.

(*k*) Morappur-Hosur railway (2′ 6″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total
1	2	3	4
Morappur to Dharmapuri	18-1-06	18·53	
Dharmapuri to Hosur	15-5-13	54·78	
TOTAL	..	..	73·31

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of pynkado.

Ballast.—The line is ballasted with stone in cuttings and moorum in banks with a stone covering broken to 2″ gauge.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius

Gradients.—The ruling gradient is 1 in 67.

Contracts—

The line is the property of Government. A portion of it, from Morappur to Dharmapuri, was worked on behalf of Government by the former Madras Railway Company up to the 31st December 1907. With effect from the 1st January 1908 it was made over to the South Indian Railway Company for maintenance and working as an integral part of their undertaking under the contracts noted under South Indian railway (3′ 3⅜″ gauge).

The other portion, from Dharmapuri to Hosur, was constructed by the agency of the South Indian Railway Company from funds provided by the Secretary of State and as such, no portion of the capital expenditure on this section up to the date of its opening is debitable to the capital account of the South Indian Railway Company. The capital account up to the date of its opening is kept separate for the Government of India. This section, however, is worked and maintained by the South Indian Railway Company as part of their undertaking under the contracts referred to in the previous paragraph.

14. SOUTH INDIAN RAILWAY SYSTEM—*contd.*

(*k*) Morappur-Hosur Railway (2′ 6″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

NOTE.—From the year 1936-37 the net earnings/working expenses have been arrived at after taking into account the 'Appropiation to Depreciation Reserve Fund' instead of actual expenditure on 'Replacement and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	73·40	30,32,268	1,19,739	2,887	0·10	31	79·59
1914-15	73·40	30,17,575	1,32,583	—23,737	..	35	117·90
1915-16	73·40	30,11,243	1,54,913	7,411	0·25	41	95·22
1916-17	73·40	29,90,738	1,71,451	14,600	0·49	45	91·48
1917 18	73·40	29,99,582	1,80,454	1,170	0·04	47	99·35
1918-19	73·40	30,14,560	1,82,696	—21,323	..	48	111·67
1919-20	73·30	30,06,951	2,31,792	—19,179	..	61	108·27
1920-21	73·30	31,83,958	2,17,716	—1,34,937	..	57	161·98
1921-22	73·30	32,52,369	2,37,836	—92,280	..	62	138·80
1922-23	73·30	33,76,034	2,62,399	—93,182	..	69	135·51
1923-24	73·30	33,79,341	2,45,112	—29,868	..	64	112·19
1924-25	73·30	33,63,297	2,35,640	—32,831	..	62	113·93
1925-26	73·30	33,47,641	2,46,961	—1,09,658	..	65	144·40
1926-27	73·30	33,32,698	2,28,111	—99,988	..	60	143·83
1927-28	73·30	33,29,606	2,57,721	—45,008	..	68	117·46
1928-29	73·30	33,45,627	2,57,020	—55,889	..	67	121·74
1929-30	73·30	33,35,195	2,50,276	—82,718	..	66	133·05
1930-31	73·30	33,33,218	2,30,226	—87,044	..	60	137·81
1931-32	73·30	33,37,662	1,96,980	—1,08,738	..	51	155·20
1932-33	73·30	33,28,086	1,75,152	—1,11,038	..	46	163·40
1933-34	73·31	33,32,100	1,47,642	—1,05,330	..	39	171·34
1934-35	73·31	33,17,946	1,49,414	—1,00,229	..	39	167·08
1935-36	73·31	33,18,471	1,32,922	—1,34,523	..	35	201·20
1936-37	73·31	33,17,425	1,78,099	—1,89,130	..	47	206·19
1937-38	73·31	33,21,232	2,05,085	—1,28,237	..	54	162·53
1938-39	73·31	33,41,545	1,60,941	—1,50,938	..	42	193·78

(*l*) Tirupattur-Krishnagiri Railway (2′ 6″ gauge)—

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
2	2	3	4
Tirupattur to Krishnagiri	18-9-05	25·38	25·38

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on cross sleepers of Malabar teak.

Ballast.—The line is ballasted with stone in cuttings and moorum in banks with a stone covering broken to 2″ gauge.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 67.

Contracts—

The line is the property of Government, on whose behalf it was worked by the former Madras Railway Company up to the 31st December 1907. With effect from the 1st January 1908 it was made over to the South Indian Railway Company for maintenance and working as an integral part of their undertaking under the contracts noted under South Indian railway (3′ 3⅜″ gauge).

14. SOUTH INDIAN RAILWAY SYSTEM—*concld.*

(*l*) Tirupattur-Krishnagiri railway (2′ 6″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix I to the Report for 1913-14.)—

NOTE.—From the year 1936-37 the net earnings/working expenses have been arrived at after taking into account the 'Appropriation to Depreciation Reserve Fund' instead of actual expenditure on 'Replacements and Renewals' previously accounted for.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	25·38	11,13,720	60,912	—5,583	0·44	46	109·17
1914-15	25·38	11,55,650	65,459	5,139	0·44	50	92·15
1915-16	25·38	11,28,324	68,245	16,248	1·47	52	76·19
1916-17	25·38	11,02,702	77,787	26,163	2·34	59	66·37
1917-18	25·38	10,99,385	92,251	26,306	2·39	70	71·48
1918-19	25·38	11,08,589	61,826	—5,489	.	47	108·88
1919-20	25·38	10,76,804	84,908	—253	..	64	100·30
1920-21	25·38	10,77,723	87,614	—4,630	..	66	105·28
1921-22	25·38	10,92,677	89,621	—42,041	..	68	146·91
1922-23	25·38	11,23,542	1,00,334	—18,857	..	76	118·79
1923-24	25·38	10,88,328	1,01,382	—32,307	..	77	131·87
1924-25	25·38	10,74,186	95,449	—1,556	..	72	101·63
1925-26	25·38	10,84,612	1,07,813	—5,205	..	82	104·82
1926-27	25·38	10,77,425	1,10,264	—21,764	..	84	119·74
1927-28	25·38	10,74,854	1,13,155	—9,236	..	86	108·16
1928-29	25·38	10,85,753	1,09,664	—6,778	..	83	106·18
1929-30	25·38	10,72,642	1,24,005	13,914	1·30	94	88·78
1930-31	25·38	10,72,865	1,13,268	—24,331	..	86	121·48
1931-32	25·38	10,78,058	1,06,245	—23,059	..	80	121·70
1932-33	25·38	10,68,482	87,488	—39,546	..	66	145·20
1933-34	25·38	10,71,722	76,521	—42,964	..	58	156·15
1934-35	25·38	10,71,722	78,633	—48,057	..	59	161·12
1935-36	25·38	10,71,758	64,738	—45,699	..	49	170·59
1936-37	25·38	10,72,632	76,666	—50,034	..	58	165·26
1937-38	25·38	10,73,509	86,152	—56,475	..	65	165·55
1938-39	25·38	11,07,339	79,173	—39,202	..	60	149·51

(*m*) Golden Rock-Sircarpalayam (2′-0″ Gauge) Tramway Lines.

Progress in opening.

Section of Railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Golden Rock-Sircarpalayam (Tramway Line).	1923	2·827	2·827	This track does not serve any kind of traffic except for lorrying materials to the pumping station at Sircarpalayam and carrying by trolly Inspecting Officials of the Company. Hence it has not been included as an integral part of the South Indian Railway system.

Details of Construction.

Permanent Way.—The permanent way consists of 18 feet 18 lb. F.F. rails laid on steel transverse sleepers at 5 sleepers per rail length fixed with clips and bolts except at level crossings and girder bridges where they are laid on wooden sleepers with dog spikes.

Ballast.—The ballast is only earth and moorum.

Fencing.—The line is unfenced throughout.

Curves.—The sharpest curve is of 716 feet radius except one of 57 feet radius within the Sircarpalayam water works area.

Gradients.—The ruling gradient is 1 in 50.

CLASS II RAILWAYS.

With gross earnings of less than Rs. 50 lakhs, but over 10 lakhs a year.

1. BARSI LIGHT RAILWAY (2′ 6″ gauge)—

Chairman.—Sir E. A. S. Bell, Kt., C.I.E.

Secretaries.—W. A. Browne & Co.

Offices.—307 Winchester House, Old Broad Street, London, E. C. 2.

Date of registration of the Company.—11th July 1895.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main Line—				
Kurduvadi to Barsi Town	1-3-97	21·59	21·59	
Extensions in British territory—				
Barsi Town to Kuslamb	15-6-05	6·34		
Kuslamb to Tadwale	1-5-06	20·36	26·70	
Kurduvadi to a point 1·78 miles from Pandharpur Town	2-12-06	30·71		
A point 1·78 miles from Pandharpur Town to Pandharpur Town	16-7-15	1·78	32·49	
Tadwale to Hyderabad Frontier	1-5-11	1·00	1·00	
Extension in Nizam's territory—				
Hyderabad Frontier to Latur	1-5-11	35·87	35·87	117·65
Pandharpur to Miraj	3-11-27	84·92	84·92	84·92
Total open mileage	..	..	..	202·57

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails on steel sleepers.

Ballast.—The line is ballasted with stone and moorum.

Fencing.—The line is unfenced, except at station yards and for a short distance on either side of level crossings and at a few bridges.

Curves.—The sharpest curve is of 425 feet radius.

Gradients.—The ruling gradient is 1 in 100. There are, however, two steeper gradients on the original line (from Kurduvadi Junction to Barsi Town)—one of 1 in 89 and one of 1 in 90; and two on the Tadwale Extension—one of 1 in 50 and the other of 1 in 70.

Contracts and agreements—

Contract, dated the 1st August 1895, *between the Secretary of State and the Barsi Light Railway Company*, as to the construction, maintenance and working of the line from Kurduvadi Junction to Barsi Town (called "the Barsi Town Railway").

Contract, dated the 26th August 1902, *between the Secretary of State and the Barsi Light Railway Company*, as to the construction, maintenance and working of "the Pandharpur Extension" and "the Tadwale Extension", as modified by letter *from the India Office to the London Board of the Barsi Light Railway Company*, No. P. W.-1020, dated the 22nd June 1904, extending to 1944 the term at the end of which the option of purchase of the Company's undertaking may be exercised by the Government under clause 59 of the contract.

Contract, dated the 28th May 1903 (supplemental to those of 1895 and 1902), *between the Secretary of State and the Barsi Light Railway Company* as to the adoption of 1*s.* 4*d.* as the "prescribed" rate of exchange.

Contract, dated the 4th December 1905 (supplemental to that of 1902), *between the Secretary of State and the Barsi Light Railway Company*, as to the construction, maintenance and working of the Pandharpur and Tadwale Extensions, and for the issue of Debenture Stock.

Contract, dated the 31st March 1909 (supplemental to the contracts of 1902, 1903 and 1905), *between the Secretary of State and the Barsi Light Railway Company*, as to the construction, maintenance and working, and the inclusion in "the Tadwale Extension," of the railway from Tadwale to the frontier of the Hyderabad State (called "the Hyderabad Frontier Extension"), near Latur in that State.

Agreement, dated the 21st April 1909, *between the Government of His Exalted Highness the Nizam of Hyderabad and the Barsi Light Railway Company*, as to the construction, maintenance and working of a railway from the frontier of the Hyderabad State to Latur in that State, known as the Latur extension.

1. BARSI LIGHT RAILWAY (2′ 6″ gauge)—*contd.*

Contracts and agreements—*concld.*

Agreement, dated the 4th May 1909, *between His Exalted Highness the Nizam's Guaranteed State Railways Company and the Barsi Light Railway Company*, as to the former waiving, in favour of the latter, its preferential right to construct and work the railway from the frontier of the Hyderabad State to Latur in that State known as the Latur extension.

Contract, dated the 7th October 1913 (supplemental to the contracts of 1902, 1903, 1905 and 1909), *between the Secretary of State and the Barsi Light Railway Company*, as to the extension of the Company's existing line from Barsi town to Pandharpur station on the north bank of the Bhima river to the town of Pandharpur.

Contract, dated the 24th February 1914 (supplemental to the contracts of 1895, 1902, 1903, 1905, 1909 and 1913), *between the Secretary of State and the Barsi Light Railway Company*, as to the adoption of the Government Financial year for the purposes of accounts.

Contract, dated the 8th August 1916 (supplemental to the contracts of 1902, 1903, 1905, 1909, 1913 and 1914), *between the Secretary of State and the Barsi Light Railway Company*, as to the proposed construction and working of railways from Pandharpur to Lonand and Miraj.

Contract, dated the 19th September 1917 (supplemental to the contract of 1895), *between the Secretary of State and the Barsi Light Railway Company*, whereby the Company is released in part from liability for maintenance and repair of provincial road on surrender of right to manage and appropriate collection of tolls on the said road.

Contract, dated the 16th October 1917 (supplemental to the contracts of 1895, 1902, 1903, 1905, 1909, 1913, 1914, 1916 and 1917), *between the Secretary of State and the Barsi Light Railway Company* by which (subject to certain reservations) the date for the first possible determination of the Company's contract for those portions of the line which are in British territory is extended from 1944 to 1954.

Contract, dated the 24th May 1921 (supplemental to the contracts of 1902, 1903, 1905, 1909, 1913, 1914, 1916 and 1917), *between the Secretary of State and the Barsi Light Railway Company*, modifying with effect from the 10th March 1921, clause 27 of the contract, dated the 26th August 1902 relative to goods rates.

Contract, dated the 2nd July 1924 (supplemental to the contracts of 1895, 1902, 1913 and 1921, and in cancellation of the contract of 1903), *between the Secretary of State and the Barsi Light Railway Company*, as to the variation of rates and fares, abolition of pontage charges over Bhima River bridge, compiling accounts and statistics annually instead of half-yearly and the rate of exchange.

Contract, dated the 8th December 1932 (supplemental to the Contract 1st August 1895 and Indenture dated 26th August 1902 and nine others), between the Secretary of State and the Barsi Light Railway Company, regarding altering the terms of final payment to be made in purchase of the line from paid up capital to capital expenditure and also in regard to altering the date (subject to some reservations) for the first possible termination of the contract from 1954 to 1949 or 1954.

Main provisions of contracts and agreements—

(i) *Land.*—In the case of the main line the Company are allowed the use of part of the road between Barsi Town and Kurduvadi Junction station, any land required outside the road being acquired at the expense of the Company. For the extensions, land in British territory has been provided by the British Government that in the Hyderabad State by the Government of His Exalted Highness the Nizam, free of cost to the Company.

(ii) *Government aid.*—Nil.

(iii) *Distribution of profits.*—The whole to go to the Company.

(iv) *Rates and fares.*—(*a*) Are such as are within the maximum and minimum fixed by the Secretary of State who shall prescribe the classification and description; (*b*) Secretary of State shall give not less than 3 months' notice in writing prior to any change being made in the rates, except in the case of a public emergency, when shorter notice may be given; (*c*) no rebate or reduction shall be granted by the Company which will have the effect of bringing the rate actually paid below the minimum without the sanction of the Secretary of State; and (*d*) pontage charges abolished from 1st October 1923.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } To be conveyed upon the extensions in British territory at the same rates and fares, and on the same general condition as may be in force on State railways. On the main line, except services for the Postal Department which are rendered at the same rates and fares and on the same general conditions as may be in force on State railways, no special provision is made for the conveyance of troops, police, high Government officials, etc. The Company have since agreed to carry Military traffic

1. BARSI LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Main provisions of contracts and agreements—*concld.*

over the main line at the same rates and fares as are in force on the extensions under the special contracts relating to them (*vide* Agent's letter No. 1471, dated the 20th October 1917). On the extension in the Nizam's territory, mails and postal officials of the Nizam's Government and the Government of India are carried free of charge. Troops, police. high Government officials, etc., of the two Governments are conveyed at special rates.

(vi) *Power of the Government to determine contract.*—The Government may, on giving to the Company in England not less than 12 calender months' notice in writing, purchase the undertaking of the Company on the 1st January 1949 or on the 1st January 1954 or at the expiration of any subsequent period of ten years. If the contract be so determined and the undertaking purchased, the Government shall have to pay over to the Company in England in sterling a sum equal to the total amount of capital expenditure in sterling incurred by the Company with the sanction of the Government on the undertaking, capital expenditure in rupees being converted into sterling for this purpose in accordance with the arrangements from time to time mutually agreed upon. His Exalted Highness the Nizam's Guaranteed State Railways Company have the option of purchasing the length of the line (excluding rolling stock, workshop machinery and stores) from the frontier of the Hyderabad State to Latur in that State, subject in all respects to the rights of the Nizam's Government under the agreement between His Exalted Highness' Government and the Barsi Light Raliway Company and also under the several contracts between that Government and the Nizam's Guaranteed State Railways Company, after the expiration of 20 years from the date of its opening throughout for traffic, on giving 12 month's notice, at a price which shall be 5 per cent. in excess of the actual capital expenditure. In the event of His Exalted Highness the Nizam's Guaranteed State Railways Company not exercising this right, His Exalted Highness the Nizam's Government have the right, on giving 12 month's notice, to purchase the same line at any time after the expiration of twenty years from the date of its opening, at a price which shall be 5 per cent. in excess of the actual capital expenditure.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi)].—Not specified.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	115·84	71,46,903	13,18,673	8,46,882	11·85	219	35·38
1914-15	115·84	79,83,731	11,17,797	6,28,070	7·87	186	43·81
1915-16	117·50	85,69,232	10,66,669	5,96,646	6·96	175	44·06
1916-17	117·50	85,47,194	11,24,923	6,44,262	7·54	184	42·73
1917-18	117·50	86,02,814	8,60,524	4,15,205	4·83	144	51·75
1918-19	117·50	86,28,186	10,10,444	5,23,007	6·06	169	48·24
1919-20	117·50	86,22,046	15,95,756	9,87,956	11·46	266	38·09
1920-21	117·50	87,11,340	14,31,896	7,70,133	8·84	244	46·22
1921-22	117·50	88,50,554	14,40,516	7,10,583	8·03	245	50·67
1922-23	117·50	89,54,648	18,13,619	9,78,455	10·93	297	46·05
1923-24	117·50	90,70,770	18,64,895	9,53,031	10·50	311	48·90
1924-25	117·65	94,27,684	17,79,805	8,92,897	9·47	303	49·83
1925-26	117·65	93,23,492	17,97,600	8,74,888	9·38	306	51·33
1926-27	117·65	1,49,65,366	17,49,585	7,99,989	5·35	297	54·27
1927-28	117·55	1,67,65,967	18,66,622	9,30,288	5·55	311	49·84
1928-29	202·57	1,72,01,062	25,29,028	11,36,847	6·61	239	55·05
1929-30	202·57	1,75,61,743	25,62,696	11,85,408	6·75	243	53·74
1930-31	202·57	1,85,31,992	20,95,024	7,27,656	3·92	199	65·27
1931-32	202·57	1,85,97,279	20,32,091	7,33,353	3·94	193	63·91
1932-33	202·57	1,87,00,667	19,35,032	7,07,607	3·78	184	63·43
1933-34	202·57	1,86,69,485	20,02,325	8,07,095	4·32	190	59.69
1934-35	202·57	1,86,50,451	18,10,335	6,76,085	3·62	172	62·65
1935-36	202·57	1,86,03,615	19,26,216	7,91,486	4·25	183	58·91
1936-37	202·57	1,85,91,238	15,34,964	4,47,949	2·41	146	70·82
1937-38	202·57	1,85,18,099	18,45,082	7,86,703	4·25	175	57·36
1938-39	202·57	1,83,79,303	18,54,664	7,98,532	4·34	176	56·94

2. BENGAL DOOARS RAILWAY SYSTEM.

Chairman.—G. ANSON BAYLEY, ESQ.

Secretary.—F. J. HORNE, ESQ.

Offices.—210-216, Gresham House, Old Broad Street, London, E.C. 2.

Date of registration of the Company.—30th July 1891.

Lines comprised in the system.—The Bengal Dooars railway system is made up of—

	Open Line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Bengal Dooars railway (3′ 3⅜″ gauge)	39·50	..	39·50
(*b*) Bengal Dooars railway extensions (3′ 3⅜″ gauge)	121·16	..	121·16
Total	160·66	..	160·66

The lines were constructed for opening out the Western Dooars and for the development of the tea industry.

(*a*) Bengal Dooars railway (3′ 3⅜″ gauge)—

Progress in opening

Sections of railway	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
East Bank of the Teesta (Barnes Ghat) to Domohani (Abandoned in 1931).	15-1-93	..			
Domohani to Dam Dim	15-1-93	25·69			
*Mile 66 to Domohani	30-7-31	2·71			*Together with miles 66 to mile 61½ southern extension comprises the chord line *vide* table (4) Progress in opening.
Branch Lines—			28·40		
Lataguri Junction to Ramshai	11-6-93	5·59			
Domohani to Barnes Ghat	1-6-33	5·51	11·10		
TOTAL	..	..	..	39·50	

Details of construction—

Permanent-way.—The line is laid with 41½-lb. flat-footed steel rails on sâl sleepers with the exception of 16·76 miles which are laid with 50 lbs. section rails.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 1,432 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Contracts and agreement—

Contract, dated the 27th April 1891 (called the principal contract), *between the Secretary of State and Messrs. Octavius Steel and Company*, Promoters, Bengal Dooars Railway Company, as to the construction, maintenance, management and working of the Bengal Dooars Railway Company's original line, including the ferries connected therewith.

Agreement, dated the 27th April 1891, *between the District Board of Jalpaiguri and Messrs. Octavius Steel and Company*, Promoters, Bengal Dooars Railway Company, as to the payment of a subsidy by the Board to the Company.

Contract, dated the 2nd March 1898 (supplemental to the contract of 1891), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the construction, management, maintenance and working of certain extensions of the Company's then existing railways.

Contract, dated the 27th September 1900 (supplemental to that of 1898), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the extension of time for the completion of the line to Hantupara.

Contract, dated the 7th November 1901 (supplemental to those of 1898 and 1900), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the extension of time for the completion of the line to Bagrakote.

Contract, dated the 16th April 1903 (supplemental to the contract of 1898), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the adoption of 1*s.* 4*d.* per rupee as the "prescribed" rate of exchange.

2. BENGAL DOOARS RAILWAY SYSTEM—*contd.*

(*a*) Bengal Dooars railway (3′ 3⅜″ gauge)—*contd.*

Contracts and agreement—*concld.*

Contract, dated the 1st May 1914 (supplemental to the contract of 1898), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the adoption of the Government financial year for the preparation of Accounts.

Contract, dated the 6th July 1916 (supplemental to the contract of 1898), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the construction, management, maintenance and working of the Chalsa-Metelli Extension as one of the extensions referred to in the contract of 2nd March 1898.

Contract, dated the 21st April 1927 (supplemental to those of 1891 and 1898), *between the Secretary of State and the Bengal Dooars Railway Company*, as to the compiling accounts and statistics annually instead of half-yearly as to purchase price of the original line and the extensions, as to rate of exchange and as to maximum and minimum rates and fares.

Contract dated the 15th February 1934 (supplemental to the contract of 1927), between the Secretary of State and the Bengal Dooars Railway Company, as to the alteration in the rates in the contract of 1927.

Main provisions of contracts and agreement—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—Original line and Extensions : Government provided free of cost certain timber for sleepers for first construction. (It was however, provided that subject to the fulfilment of certain conditions on the request of the Company, the Government should take over the original line and extensions, and should work and maintain them through the agency of the Eastern Bengal railway, at 40 per cent. of the gross receipts in each half-year, paying the remaining 60 per cent. over to the Company.)

Note.—Original line: The District Board of Jalpaiguri agree to pay to the Company, out of the District Fund, an annual subsidy of such amount, not exceeding Rs. 4,000, as may be required to make up the net profits of the original line in each year to 5 per cent. on the capital sum expended.

(iii) *Terms of working.*—
(iv) *Distribution of profits.*— } The whole of the profits to go to the Company. In the event of the lines being worked by the Eastern Bengal Railway the Government should retain in each half year 40 per cent of the gross earnings, the remaining 60 per cent. being paid to the company after deduction of the incometax payable to Government.

(v) *Rates and fares.*—For the Northern Section (Maynaguri Road to Dam Dim, including the branch from Lataguri junction to Ramshai, Dam Dim to Bagrakote, Mal Junction to Madarihat, including the branch from Chalsa Junction to Matelli) :—Certain maxima and minima rates and fares for goods and passengers have been fixed. All other coaching traffic is carried at double the rates approved from time to time by the Indian Railway Conference Association. For the Southern Section (Lalmanirhat Junction to Maynaguri Road) :—Goods are carried within the maximum and minimum rates approved by the Indian Railway Conference Association. Passengers are carried under the same schedule of maximum and minimum fares as applies on the Eastern Bengal Railway. All other Coaching traffic is carried at the rates approved from time to time by the Indian Railway Conference Association.

(vi) *Special obligations as to the conveyance of.*—

(*a*) Mails, troops, police, high Government officials and Government stores.—Mails to be carried under the same terms and conditions as mails were at the date of contract of 1891 being carried on the Eastern Bengal Railway, the Government having power to fix the timing of one train each way daily for the carriage of mails. Postal officials travelling on duty to be given free passes.

(*b*) Government bullion and coin, and the persons in charge thereof.—Not specified.

(vii) *Power of the Government to determine contract.*—If the Company fail to work the Original line and the Extensions for six consecutive months, the Government may determine the contract by paying to the Company a sum equal to their actual expenditure up to the date of notice.

The Secretary of State has the right to purchase the Original line and the Extensions on the 31st December 1919, and at the end of any succeeding seventh year, by giving 12 months' previous notice. In the event of such purchase the price to be paid for the Original line is to be a cash payment of one and two-fifths of the amount of the sterling equivalent of the actual expenditure on the original line for capital purposes with the sanction of Government ; while the price for the Extensions is to be a cash payment in England in sterling of a sum equal to 25 years' purchase of the average of the net earnings of the Extensions during the last preceding 5 years, provided that such sums shall not exceed by more than 20 per cent., nor be less than, the total amount in sterling equivalent to the actual expenditure on the Extensions for Capital purposes with the sanction of Government.)

NOTE.—The Secretary of State did not exercise his right of purchase at the end of 1919, 1926 and 1933.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—Non specified.

2. BENGAL DOOARS RAILWAY SYSTEM—*contd.*

(*a*) Bengal Dooars railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1893 .	36·40	18,49,091	1,14,812	57,639	3·12	..	57,639	3·12	69	49·80
1894 .	36·40	22,84,223	2,05,286	1,04,291	4·57	4,000	1,08,291	4·74	109	49·20
1895 .	36·40	23,26,476	2,53,537	1,27,459	5·48	4,000	1,31,459	5·65	125	49·73
1896 .	36·40	24,33,213	2,70,451	1,31,814	5·42	..	1,31,814	5·42	136	51·26
1897 .	36·40	25,78,562	2,86,407	1,45,289	5·63	..	1,45,289	5·63	145	49·27
1898 .	36·40	26,68,050	2,69,089	1,14,620	4·30	4,000	1,18,620	4·45	135	57·40
1899 .	36·40	26,26,748	2,73,038	1,18,417	4·51	4,000	1,22,417	4·66	137	56·63
1900 .	36·40	26,42,695	3,32,730	1,89,460	7·17	..	1 89,460	7·17	168	43·06
1901 .	36·40	26,44,873	3,10,920	1,76,399	6·67	..	1,76,399	6·67	156	43·27
1902 .	36·40	26,50,627	2,73,340	1,71,455	6·47	..	1,71,455	6·47	144	37·27
1903 .	36·40	26,95,547	3,11,131	2,24,952	8·35	..	2,24,952	8·35	156	27·70
1904 .	36·40	26,64,642	3,46,277	2,56,651	9·63	..	2,56,651	9·63	175	25·88
1905 .	36·40	27,26,891	3,70,343	2,49,598	9·15	..	2,49,598	9·15	198	32·60
1906 .	36·40	27,33,098	4,08,623	2,96,703	10·86	..	2,96,703	10·86	218	27·39
1907 .	36·40	27,56,535	4,20,705	2,84,722	10·33	..	2,84,722	10·33	222	32 65
1908 .	36·40	27,79,347	4,37,252	3,34,102	12·02	..	3,34,102	12·02	231	43·59
1909 .	36·40	28,40,534	4,46,811	3,54,527	12·48	..	3,54,527	12·48	236	20·65
1910 .	36·40	29,73,769	4,86,375	3,73,343	12·55	..	3,73,343	12·55	257	23·24
1911 .	36·40	31,18,394	4,94,386	3,86,765	12·40	..	3,86,765	12·40	261	21·76
1912 .	36·40	31,71,542	5,41,376	4,16,170	13·12	..	4,16,170	13·12	286	23·13
1st qr. of 1913 .	36·40	31,76,034	1,13,010	77,510	2·44	..	77,510	2·44	239	31·41
1913-14 .	36·40	32,04,393	5,91,202	4,36,529	13·62	..	4,36,529	13·62	312	26·16
1914-15 .	36·40	33,37,555	5,76,739	4,21,605	12·63	..	4,21,605	12·63	305	26·90
1915-16 .	36·40	33,16,175	6,06,384	4,47,087	13·48	..	4,47,087	13·48	320	26·27
1916-17 .	36·40	33,16,000	6,60,348	4,87,485	14·70	..	4,87,485	14·70	349	26·18
1917-18 .	36·40	33,14,942	6,36,781	4,74,792	14·32	..	4,74,792	14·32	336	25·44
1918-19 .	36·40	32,94,030	6,72,871	4,86,900	14·78	..	4,86,900	14·78	355	27·64
1919-20 .	36·40	33,29,578	6,55,094	4,49,980	13·51	..	4,49,980	13·51	346	31·35
1920-21 .	36·40	33,60,867	5,56,807	3,51,273	10·45	..	3,51,273	10·45	294	36·91
1921-22 .	36·40	33,67,100	5,08,323	3,08,276	9·16	..	3,08,276	9·16	269	39·35
1922-23 .	36·40	33,82,595	6,63,858	4,61,311	13·64	..	4,61,311	13·64	350	30·51
1923-24 .	35·23	34,27,088	7,51,019	4,98,723	14·55	..	4,98,723	14·55	408	33·59
1924-25 .	35·23	34,98,657	7,96,066	5,51,105	15·75	..	5,51,105	15·75	433	30·78
1925-26 .	35·23	35,37,626	7,36,066	4,94,367	13·90	..	4,94,367	13·90	401	32·84
1926-27 .	35·06	35,83,604	7,61,333	4,68,248	13·07	..	4,68,248	13·07	417	38·50
1927-28 .	35·04	36,86,677	8,44,885	5,12,409	13·90	..	5,12,409	13·90	464	39·35
1928-29 .	35·04	38,56,126	8,31,256	5,24,125	13·59	..	5,24,125	13·59	456	36·95
1929-30 .	35·04	40,80,229	8,85,357	5,21,332	12·77	..	5,21,332	12·77	486	41·12
1930-31 .	35·04	41,42,050	7,71,779	4,24,041	10·24	..	4,24,041	10·24	424	45·06
1931-32 .	33·71	41,53,064	6,16,868	3,24,218	7·80	..	3,24,218	7·80	352	47·44
1932-33 .	33·71	40,90,823	6,20,018	3,44,196	8·41	..	3,44,196	8·41	354	44·49
1933-34 .	39·50	42,48,381	6,45,162	3,49,039	8·21	..	3,49,039	8·21	314	45·90
1934-35 .	39·50	43,09,555	6,73,044	3,51,673	8·16	..	3,51,673	8·16	328	47·75
1935-36 .	39·50	43,89,445	6,05,231	3,11,757	7·10	..	3,11,757	7·10	295	48·49
1936-37 .	39·50	44,40,309	5,03,091	2,39,415	5·39	..	2,39,415	5·39	244	52·41
1937-38 .	39·50	44,72,874	5,68,995	2,78,117	6·22	..	2,78,117	6·22	277	51·12
1938-39 .	39·50	45,46,484	6,01,105	3,04,404	6·70	..	3,04,404	6·70	292	49·36

(*b*) Bengal Dooars railway extensions (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Eastern extension—					
Mal Jn. to Chalsa Jn.	1-4-01	5·12			
Chalsa Jn. to Chengmari.	1-1-03	13·51			
Chengmari to Dalgaon	23-3-03	15·53			
Dalgaon to Madarihat	14-6-03	9·42			
Chalsa Jn. to Metelli	10-6-18	5·23			
			48·81		
Southern extension—					
Barnes Junction to Mile 61½ (Abandoned in 1931)	20-4-00	..			
†Mile 66 to Mile 61½	30-7-31	4·52			†Together with mile 66 to Domohani comprises the Chord Line *vide* table (*a*) Progress in opening.
Mile 61½ to Baura	20-4-00	23·57			
Baura to Bhotemari	21-10-00	16·76			
Bhotemari to Lalmanirhat	20-11-00	20·83			
			65·68		
Western extension—					
Dam Dim to Oodlabari	1-5-01	2·81			
Oodlabari to Bagrakote	1-1-02	3·86			
			6·67		
GRAND TOTAL	..	..	..	121·16	

Details of construction—

Permanent-way.—The line is laid with 41½-lbs flat-footed steel rails on sal sleepers, with the exception of 17·24 miles which are laid with 50 lbs. section rails.

Ballast.—The line is ballasted with stone except the Chalsa-Metelli section which is ballasted with sand.

2. BENGAL DOOARS RAILWAY SYSTEM—*concld.*

(*b*) Bengal Dooars railway extensions (3′ 3⅜″ gauge)—*concld.*

Details of construction—*concld.*

Fencing.—The line is unfenced, except at stations.

Curves.—The sharpest curve is of 818 feet radius on the Chalsa-Metelli section.

Gradients.—The ruling gradient of the Southern extension is 1 in 200, of the Eastern and Western extensions 1 in 100 and of the Chalsa-Metelli section 1 in 40.

Contracts and Agreements—
Main provisions of contracts and agreements— As noted under Bengal Dooars railway (3′ 3⅜″ gauge).

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Remarks.
1	2	3	4	5	6	7	8	9
	Miles.	Rs.	Rs.	Rs.		Rs.		
1900	66·00	47,11,632	16,191	..	..	14	72·32	The net earnings for 1900, 1901, 1902 and 1st half of 1903 were credited to interest on capital during construction.
1901	74·30	62,26,954	1,76,389	..	..	47	60·92	
1902	77·76	72,66,165	2,53,634	..	..	63	65·99	
1903	116·56	80,10,365	3,46,666	79,199	0·99	61	65·78	
1904	116·56	84,97,572	4,15,179	1,08,680	1·28	68	73·85	
1905	116·56	87,92,080	5,12,343	1,97,824	2·25	85	61·39	
1906	116·56	89,99,516	5,83.852	2,91,256	3·24	96	50·10	
1907	116·56	90,70,826	6,04,153	1,43,585	1·58	99	76·23	
1908	116·56	90,88,887	6,19,972	3,14,228	3·46	102	49·31	
1909	116·56	91,36,146	6,08,419	3,14,641	3·44	100	48·28	
1910	116·56	92,06,724	6,58,433	3,45,725	3·75	109	47·49	
1911	116·56	93,43,461	7,07,730	3,60,021	3·85	117	49·13	
1912	116·56	94,43,641	8,92,405	5,01,116	5·31	147	43·85	
1st qr. of 1913	116·56	94,82,328	2,09,414	1,06,083	1·12	138	49·34	
1913-14	116·56	95,55,890	10,49,680	5,55,144	5·92	173	46·07	
1914-15	116·56	99,98,430	10,21,995	5,09,685	5·10	169	50·13	
1915-16	116·56	1,05,48,389	10,35,813	5,08,966	4·83	171	50·86	
1916-17	116·56	1,07,40,183	11,09,183	5,16,134	4·81	183	52·47	
1917-18	116·56	1,08,54.886	10,72,858	5,01,311	4·62	177	53·27	
1918-19	121·80	1,10,04,232	11,56,375	5,47,517	4·98	185	52·65	
1919-20	121·80	1,11,96,431	11,53,982	4,49,531	4·02	182	61·04	
1920-21	121·80	1,11,76,911	9,79,377	2,48,162	2·22	155	74·66	
1921-22	121·80	1,12,20,546	9,18,745	2,49,913	2·23	145	72·80	
1922-23	121·80	1,12,84,501	11,49,334	4,65,996	4·13	181	59·46	
1923-24	121·46	1,12,38,383	13,02,360	4,62,908	4·12	205	64·46	
1924-25	121·46	1,13,05,095	14,67,818	5,59,917	4·95	232	61·85	
1925-26	121·46	1,14,03,842	14.93,782	6,32,574	5·55	236	57·65	
1926-27	121·05	1,15,82,551	15,82,374	6,41,769	5·54	251	59·44	
1927-28	121·09	1,17,14,403	16,67,322	7,01,224	5·99	265	57·94	
1928-29	121·09	1,20,56,893	17,01,440	7,46,045	6·19	270	55·85	
1929-30	121·09	1,21,38,172	18,52,798	7,75,832	6·39	294	58·12	
1930-31	121·09	1,22,54,746	15,98,147	6,38,429	5·21	254	60·05	
1931-32	121·25	1,22,70,015	12,83,516	4,90,993	4·00	204	61·75	
1932-33	121·25	1,21,63,209	13,28,069	4,81,597	3·96	211	63·74	
1933-34	121·16	1,21,25,199	13,60,886	4,79,978	3·96	216	64·73	
1934-35	121·16	1,21,42,727	13,83,967	5,16,940	4·26	220	62·25	
1935-36	121·16	1,21,56,417	12,48,319	3,69,359	3·04	198	70·41	
1936-37	121·16	1,21,59,396	12,25,558	3,91,190	3·21	194	68·08	
1937-38	121·16	1,21,94,102	13,80,678	5,05,140	4·15	219	63·41	
1938-39	121·16	1,22,05,850	13,67,655	4,91,320	4·03	217	64·03	

3. BHAVNAGAR STATE RAILWAY (3′ 3⅜″ gauge).

This line was constructed by Government Agency for the Indian State of Bhavnagar (after which it is named). It was worked up to the 31st March 1911 by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway. The Coalition ceased to exist on the 1st April 1911 on and from which date the line is being worked independently as a separate and distinct railway.

(a) **Progress in opening—**

Sections of railway.	Date of opening	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Bhavnagar Docks to Wadhwan Junction	20-12-80	*105·11	105·11		* Includes 1·21 miles of Dock estate line which is worked for goods traffic only.
Branches—					
Dhasa branch—					
Dhola to Dhasa	19-1-81	15·33	15·33		
Kundla extension—					
Dhasa to Liliamota	1-10-11	20·80			
Liliamota to Savar Kundla	17-3-12	15·00	35·80		
Palitana branch—					
Sihor to Palitana	16-11-10	16·92	16·92		
Jasdan extension—					
Botad to Vinchhia	15-5-13	18·41			
Vinchhia to Jasdan	15-9-13	15·06	33·47		
Mahuva extension—					
Savar Kundla to Gadhakda	1-2-21	10·98			
Gadhakda to Rajula Road	10-6-22	13·00			
Rajula Road to Mahuva	22-11-22	23·44			
Mahuva Yard	20-3-1938	0·03	47·45†		† Includes 4·35 miles of Mahuva Dock estate line which is worked for goods traffic only.
Botad-Dhandhuka extension—					
Botad to Tagdi	16-3-22	24·02			
Tagdi to Dhandhuka	22-11-22	5·92	29·94		
Rajula Road to Rajula	20-6-27	5·84	5·84		
Dungar Victor Extension—					
Dungar to Dock Estate	15-3-28	7·66	7·66‡		‡Includes 2·86 miles of Port Albert Victor Bundar which is opened for goods traffic only.
Ningala Gadhada Extension—					
Ningala to Gadhada	1-1-29	9·52	9·52		
Grand Total		..	..	307·04	

Details of construction—

Permanent-way.—The permanent-way consists of 50-lb., 41¼-lb. and 40-lb. flat-footed steel rails and Jodka teak sleepers. The main line, except at some of the station yards, and 15·92 miles of the Botad-Dhandhuka extension are laid with 50-lb. rails; 49·71 miles of the Kundla and Mahuva extensions, the Dhasa and Palitana branches, the rest of the Botad-Dhandhuka extension, Rajula Road to Rajula, Dungar Victor and Ningala Gadhada Sections with 41¼-lb. rails; and the Jasdan extension and the remaining portions of the Kundla and Mahuva extensions, with 40-lb. rails.

Ballast.—The line from Bhavnagar to Wadhwan Junction and Dhola to Dhasa Junction is ballasted with broken stone, with the exception of the length between Chuda and Wadhwan, which is ballasted with kunkur. All other Sections are ballasted with stone in cuttings and moorum or sand in banks.

Fencing.—The line is practically unfenced.

Curves.—The sharpest curves are as under:—

1,000 ft. radius on Bhavnagar-Wadhwan, Sihor-Palitana and Dungar-Victor Sections.

2,500 ft. radius on Dhola Dhasa Section.

1,432 ft. radius on Dhasa-Kundla, Botad-Jasdan and Botad Dhandhuka Sections.

1,146 ft. radius on Kundla Mahuva Section.

716 ft. radius on Rajula Road Rajula Section.

573 ft. radius on Ningala Gadhada Section.

Gradien s.—On the main line and the Botad-Dhandhuka section the ruling gradient is 1 in 200, except for about 10 chains near the Ranpur Bhogawa bridge where it is 1 in 100. On Sihor Palitana and Ningala Gadhada Sections it is 1 in 100, between Dhasa and Mahuva and between Rajula Road-Rajula 1 in 125, between Dungar and Victor 1 in 140 and between Botad and Jasdan 1 in 150.

Agreement—

Nil.—The line is owned and worked by the Bhavnagar State, except Jasdan extension, which though worked by the Bhavnagar State Railway is owned under a partnership between Bhavnagar and Jasdan States.

3. BHAVNAGAR STATE RAILWAY (3′ 3½″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix I to the Railway Administration Report for 1913-14.)—

Year	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	206·31	1,12,27,133	14,42,984	7,38,766	6·58	135	48·80
1914-15	206·31	1,20,88,075	15,48,360	8,28,088	6·85	144	46·52
1915-16	206·31	1,21,16,506	14,93,420	7,81,522	6·45	139	47·67
1916-17	206·31	1,22,06,582	16,39,442	8,46,223	6·93	153	48·38
1917-18	206·31	1,23,62,479	17,65,940	10,52,256	8·51	165	40·41
1918-19	206·31	1,24,89,015	25,35,803	15,47,733	12·39	236	38·96
1919-20	206·31	1,35,22,553	25,04,287	13,80,076	10·21	233	44·89
1920-21	217·29	1,42,77,210	23,92,333	11,13,069	7·80	212	53·47
1921-22	240·13	1,57,35,759	23,40,179	9,54,099	6·06	187	59·23
1922-23	282·81	1,80,25,007	29,90,373	12,53,305	6·95	203	58·09
1923-24	282·81	1,82,42,714	32,96,186	14,07,521	7·72	224	57·30
1924-25	282·81	1,84,08,510	31,95,491	13,68,043	7·43	217	57·19
1925-26	283·99	1,87,19,533	33,80,840	14,96,584	7·99	230	55·85
1926-27	283·99	1,92,66,168	28,77,026	10,12,646	5·26	195	64 80
1927-28	297·49	1,98,59,042	29,13,295	11,59,484	5·90	188	60·20
1928-29	307·01	2,03,71,380	33,83,469	16,08,375	7·90	217	52·46
1929-30	307·01	2,06,94,744	31,76,080	12,98,810	6·28	199	59·11
1930-31	307·01	2,13,96,523	30,08,892	11,53,787	5·39	188	61·65
1931-32	307·01	2,17,47,489	30,28,983	11,98,236	5·51	190	30·44
1932-33	307·01	2,22,27,121	32,26,134	13,23,094	5·95	202	58·99
1933-34	307·01	2,27,90,773	34,24,748	15,13,386	6·64	215	55·81
1934-35	307·01	2,39,43,679	36,22,303	18,29,678	7·64	227	49·50
1935-36	307·01	2,41,37,825	34,38,497	14,68,485	6·08	215	57·29
1936-37	307·01	2,47,48,955	33,18,188	13,55,844	5·48	208	59·14
1937-38	307·04	2,53,40,228	30,81,342	10,71,415	4·23	193	65·23
1938-39	307·04	2,54,29,154	29,54,575	9,48,857	3·73	185	67·89

(*b*) BHAVNAGAR TALAJA-MAHUVA TRAMWAY (Gauge 2′-6″).

Progress in opening—

Sections of Railway.	Date of opening.	Miles.	Total	Grand Total	Remarks.
1	3	3	4	5	6
Bhavnagar Talaja	5-1-26	*32·74	32·74	67·74	*Shows mileage in 1937-38. For previous mileage see statistics of working.
Talaja to Mahuva extension	20-3-38	34·73	34·73		

Details of construction.—

Permanent-way.—The permanent-way consists of 30 lbs. and 41¼ lbs. flat-footed steel rails on Jodka Teak half round sleepers.

Ballast.—The line is ballasted with broken stone metal and muram.

Fencing.—The line is practically unfenced.

Curves.—The sharpest curve is of 30° near Tansa and Talaja.

Gradients.—Ruling gradient is I in 75.

Statistics of working.

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital, outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1925-26	33·17	10,13,316	23,960	14,480	6·14	60	39·57
1926-27	33·17	10,86,841	89,435	40,351	3·71	52	54·88
1927-28	33·17	10,88,792	93,082	37,813	3·47	54	59·38
1928-29	34·74	11,20,326	1,05,499	56,028	5·00	61	46·89
1929-30	34·74	11,88,266	1,10,269	51,361	4·32	61	53·42
1930-31	34·74	12,02,817	1,06,183	50,394	4·19	59	52·54
1931-32	34·74	12,20,864	1,04,416	46,332	3·80	58	55·63
1932-33	34·74	12,35,388	1,09,153	44,468	3·60	60	59·26
1933-34	34·74	12,45,766	1,13,447	59,367	4·77	63	47·67
1934-35	34·74	12,99,219	1,21,568	68,105	5·24	67	43·98
1935-36	34·74	13,54,741	1,14,128	55,503	4·10	63	51·37
1936-37	34·74	13,66,978	1,14,232	54,731	4·00	63	52·09
1937-38	32·74†	13,86,742	1,21,498	52,706	3·80	67	56·62
1938-39	67·47	32,52,746	1,84,791	56,813	1·75	53	69·26

†2 miles of the Bhavnagar-Talaja Tramway included in Talaja Mahuva Tramway extension.

4. BIKANER STATE RAILWAY—(3′ 3⅜″ gauge).

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5
Main line—				
Marwar Frontier to Bikaner	9-12-91	47·75		
Bikaner to Dulmera	2-6-98	42·00		
Dulmera to Suratgarh	1-1-01	71·85		
Suratgarh to Bhatinda	9-9-02	88·00		
Hissar extension—			249·60	
Marwar Frontier to Sujangarh	16-9-09	1·42		
Sujangarh to Ratangarh	2-2-10	28·56		
Ratangarh to Churu	22-5-10	26·61		
Churu to Hissar	8-7-11	79·36		
Bikaner-Ratangarh Chord—			135·95	
Bikaner to Ratangarh	24-11-12	84·97		
Kolayat extension—			84·97	
Lalgarh to Kolayat	30-10-22	28·91		
Canal Loop Line—			28·91	
Hanumangarh to Sadulshahr	26-4-23	23·40		
Sadulshahr to Sri Ganga Nagar	1-8-23	18·54		
Suratgarh to Raisinghnagar	1-10-25	25·23		
Sri Ganga Nagar to Kesrisinghpur	1-5-26	15·26		
Kesrisinghpur to Raisinghnagar	1-9-27	33·98		
Sardarshahr extension—			126·41	
Hudera (2 miles from Ratangarh) to Sardarshahr	1-3-16	27·29		
Hanumangarh Jn.—Sadulpur—			27·29	
Hanumangarh to Nohar	15-9-27	45·76		
Nohar to Tahsil Bhadran	16-9-28	25·10		
Tahsil Bhadran to Suratpura	13-11-30	36·58		
Anupgarh Branch—			107·44	
Sarupsar to Anupgarh	30-3-29	35·28	35·28	
Sadulpur-Rewari—				
(*i*) Sadulpur-Loharu Section	11-12-38	31·00		
(*ii*) Loharu-Mohindra Garh Section	23-2-39	25·44	56·44	
TOTAL OPEN MILEAGE	..	..	..	852·29
Lines under construction or sanctioned for construction—				
Mohindra Garh to Rewari (Sanctioned on 4th March 1937)	..	31·01	31·01	31·01
Grand Total	..	..	..	883·30

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed rails, 50 lbs. per yard for 679·74 miles, 40 lbs. per yard for 77·25 miles, and 36 lbs. per yard for 95·30 miles laid on steel trough, deodar, sal, chir, kail and half-round teak sleepers.

Ballast.—The ballast consists of coarse sand and small kunkur, except on the Suratgarh-Bhatinda section where it is broken brick and kunkur.

Fencing.—The line is unfenced, except at a few stations.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 350 (compensated) on Hanumangarh Jn.—Nohar Section, 1 in 350 on Nohar to Sadulpur Section, 1 in 150 on the Bhatinda-Chilo and Sujangarh-Hissar Sections, 1 in 200 on the Bikaner-Ratangarh chord and Sardarshahr extension, 1 in 350 on the Kolayat extension, Canal Loop line and the Anupgarh Branch.

Agreements—

Nil.—The line is owned by the Bikaner Durbar and was worked by the late Jodhpur-Bikaner Railway administration up to the 31st October 1924. It was taken over by the Bikaner Durbar with effect from the 1st November 1924.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year. 1	Mileage open at end of each year. 2	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction. 3	Gross earnings. 4	Net earnings. 5	Percentage of net earnings on total capital outlay given in column (3). 6	Earnings per mile per week. 7	Proportion of expenses to earnings. 8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	470·37	1,10,31,983	18,72,383	9,71,270	8·80	77	48·13
1914-15	470·37	1,17,65,712	17,65,677	8,82,773	7·50	72	50·00
1915-16	497·66	1,21,34,077	21,46,094	10,51,032	8·66	83	51·03
1916-17	497·66	1,20,57,874	19,14,090	8,49,179	7·04	74	55·64
1917-18	497·66	1,21,04,054	18,39,443	10,18,736	8·42	71	44·62
1918-19	497·66	1,21,01,657	27,98,693	14,58,834	12·05	108	47·87
1919-20	497·66	1,23,33,199	28,11,417	13,74,944	11·15	109	51·09
1920-21	497·66	1,39,32,035	28,97,093	10,74,902	7·72	112	62·90
1921-22	497·66	1,56,25,292	29,01,830	8,36,846	5·34	112	71·19
1922-23	526·23	1,92,49,743	34,12,473	8,46,590	4·40	125	75·16
1923-24	567·90	1,99,63,499	33,70,178	8,14,733	4·08	114	75·83
1924-25	568·66	2,21,16,490	37,15,139	13,54,346	6·12	126	63·55
1925-26	603·89	2,60,88,443	34,50,807	6,17,399	2·37	110	82·10
1926-27	619·15	2,89,71,503	38,45,808	6,38,315	2·20	119	83·40
1927-28	698·89	2,99,82,757	42,57,502	13,69,090	4·57	117	67·84
1928-29	759·27	3,29,89,473	38,65,654	12,59,880	3·82	98	67·41
1929-30	759·27	3,41,39,796	44,96,449	15,90,136	4·66	114	64·63
1930-31	795·85	3,55,02,386	48,48,092	16,43,113	4·63	117	66·11
1931-32	795·85	3,62,62,738	41,70,649	12,01,405	3·31	101	71·18
1932-33	795·85	3,64,28,641	36,03,500	8,65,038	2·37	87	76·00
1933-34	795·85	3,63,79,256	36,30,553	11,32,044	3·11	88	68·82
1934-35	795·85	3,64,62,361	38,81,164	13,88,134	3·81	94	64·24
1935-36	795·85	3,65,31,550	39,07,560	11,41,179	3·13	94	70·78
1936-37	795·85	3,65,71,769	39,40,529	11,90,481	3·26	95	69·78
1937-38	795·85	3,82,08,235	45,14,603	15,96,340	4·18	109	64·64
1938-39	852·29	4,04,68,716	51,52,648	20,12,767	4·97	116	60·93

5. DARJEELING HIMALAYAN RAILWAY SYSTEM.

Lines comprised in the system.—The Darjeeling Himalayan railway system is made up of—

	Miles.
(*a*) Darjeeling Himalayan railway (2′ 0″ gauge)	51·07
(*b*) Darjeeling Himalayan railway extensions (2′ 0″ gauge)	95·44
Total	146·51

(*a*) Darjeeling Himalayan railway (2′ 0″ gauge)—

Agents.—Messrs. Gillanders Arbuthnot and Company, Calcutta.

Date of registration of the Company.—1879.

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4
Siliguri to Kurseong	23-8-80	31·75	
Kurseong to Sonada	1-2-81	9·50	
Sonada to Ghum	4-4-81	5·87	
Ghum to Darjeeling	4-7-81	3·63	
Darjeeling to Darjeeling Bazar	16-6-85	0·25	
TOTAL	..		51·00
Regrading line—			
Between Ghum and Darjeeling	10-3-19	0·07	0·07
GRAND TOTAL	..	..	51·07

Details of construction—

Permanent-way.—The line is laid mainly with 41¼-lb. flat-footed steel rails on wooden sleepers. These are being renewed with a special section steel rail 50¼-lbs. to the yard, as required. A length of 7·79 miles has been renewed with 50 lbs. rails. A length of 6·16 miles has been relaid with a special section steel rail 50¼lbs. to the yard.

Ballast.—For 7 miles from Siliguri the line has been ballasted with broken stone, except near Siliguri, where sand has been used. On the greater portion of the hill section, broken stone ballast has been put in.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 60 feet.

Gradients.—The ruling gradient of the greater part of the line is about 1 in 25; from Sukna to Ghum (summit) and thence to Darjeeling. There is a length of about three-fourths of a mile on grades of 1 in 22½ to 1 in 23, uncompensated, with short lengths of 1 in 20.

Contract and agreements—

Contract, dated the 8th April 1879, *between the Secretary of State and the late Mr. Franklin Prestage,* as to the construction, maintenance, management and working of the railway.

Agreement, dated the 24th January 1913, *between the Secretary of State and the Darjeeling Himalayan Railway Company,* providing for the exclusion from the Company's capital of the preference share raised for buying up the shares of the Darjeeling Himalayan Railway Extensions Company for the purposes of clause 16 of the contract of 8th April 1879.

Agreement, dated the 30th July 1913, *between the Secretary of State and the Darjeeling Himalayan Railway Company,* as to the adoption of Government financial year for the preparation of Accounts.

Agreement, dated the 17th September 1915 (supplemental to the contract of 1879), *between the Secretary of State and the Darjeeling Himalayan Railway Company,* as to the works to be executed on the hill cart road and rates of payment to the Company as from the 20th May 1913.

Agreement, dated the 14th August 1922 (supplemental to the contract of 1879 and agreements of 24th January and 30th July 1913), *between the Secretary of State and the Darjeeling Himalayan Railway Company,* as to the application of the surplus of the half share of excess profits divisible between the Secretary of State and the Company.

Agreement, dated the 18th June 1923 (supplemental to the contract of 1879), *between the Secretary of State and the Darjeeling Himalayan Railway Company,* as to the rates and fares chargeable by the Company for the carriage of goods and passengers as from the 18th June 1923.

Main provisions of contract and agreements—

(i) *Land.*—Government land, and the right to use the existing cart road, to be granted to the Company free of cost. Other land necessary, if any, to be acquired by the Government and transferred to the Company at cost price.

(ii) *Government aid.*—The Government undertake to pay to the Company any sum required to make up its gross receipts to two lakhs of rupees annually, which will include charges for carriage of mails troops or stores.

5. DARJEELING HIMALAYAN RAILWAY SYSTEM—*contd.*

(*a*) **Darjeeling Himalayan railway** (2′ 0″ gauge)—*concld.*

Main provisions of contract and agreements—*concld.*

(iii) *Distribution of profits.*—After the first five years half the net profits of any year in excess of 5 per cent. on the paid up capital to be applied in repayment to the Government of the amount expended on the maintenance of the cart road during the same year, or in making good a deficiency in gross receipts.

(iv) *Rates and fares.*—Certain maxima have been fixed within which the Company is permitted to vary rates and fares.

(v) *Special obligations as to the conveyance of*—

(*a*) Mails, troops, police, high Government Officials and Government stores.—Mails and Post office servants to be carried by the Company in consideration of a payment by the Government of Rs. 10,260 yearly. [No special provision exists as to troops, police, high Government Officials and Government stores.]

(*b*) Government bullion and coin, and the persons in charge thereof.—None specified.

(vi) *Power of the Government to determine contract.*—
(vii) *Power of the Company to surrender contract.*— } If at any period the railway should not be worked for six consecutive months, the Company is to surrender the road and land acquired from the Government, receiving any sum due to it for permanent improvements to the road or works connected with it.

After the railway has been opened for 25 years (reckoning from the 4th May 1884), and thereafter at intervals of 10 years, the Government have the power, by giving 12 months' previous notice, to terminate the contract and take over the line on payment to the Company of its value as a dividend-earning investment, with an additional bonus of 20 per cent. over and above such value.

Note.—Government relinquished the right to terminate the contract at the end of the 25th year, and decided to allow the contract of the 8th April 1879 to continue for a period of 10 years, *viz.*, to May 1919 (*vide* Railway Board's letter No. 1412-R.T., dated the 1st August 1908, to the Secretary to the Government of Bengal, Railway Department). Subsequently the duration of the contract has been twice extended for periods of 10 years, *viz.*, to May 1929, and May 1939, respectively.

(viii) *Term of contract.*—None specified.

Note.—Arbitration award, dated 9th November 1929, between the Secretary of State for India in Council and the Darjeeling Himalayan Railway Company, Limited, as to the upkeep and maintenance of the Hill Cart Road.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Government share of surplus profits.	Total income (column 5—column (7).	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14 .	51·00	40,76,057	11,98,789	5,01,315	12·30	1,08,006	3,93,309	9·65	452	58·18
1914-15 .	51·00	43,01,734	11,35,682	4,69,576	10·91	97,675	3,71,901	8·64	428	58·65
1915-16 .	51·00	43,62,976	11,89,696	4,99,218	11·44	1,06,612	3,92,606	9·00	449	58·04
1916-17 .	51·00	44,72,697	13,01,592	4,48,832	10·03	95,565	3,53,267	7·90	491	65·52
1917-18 .	51·00	46,06,491	12,87,179	4,60,874	10·00	97,089	3,63,785	7·90	485	64·19
1918-19 .	51·07	46,27,191	13,69,537	4,86,078	10·50	1,06,318	3,79,760	8·21	516	64·51
1919-20 .	51·07	46,66,875	14,11,959	5,11,560	10·96	1,17,896	3,93,664	8·43	532	63·78
1920-21 .	51·07	47,49,352	14,68,779	5,20,830	10·97	1,27,639	3,93,191	8·38	552	64·54
1921-22 .	51·07	47,10,205	14,95,949	4,81,237	10·22	98,538	3,82,699	8·12	563	67·83
1922-23 .	51·07	49,10,519	15,07,622	4,59,603	9·36	93,439	3,66,164	7·46	568	69·51
1923-24 .	51·07	49,14,063	16,27,221	5,97,954	12·16	1,36,134	4,61,820	9·80	610	63·25
1924-25 .	51·07	47,40,818	16,83,962	6,62,229	13·97	1,57,134	5,05,095	10·65	633	60·67
1925-26 .	51·07	50,09,314	17,46,244	5,38,012	10·74	1,20,199	4,17,813	8·34	657	69·19
1926-27 .	51·07	49,65,393	17,65,375	5,55,309	11·18	1,25,252	4,30,057	8·66	666	68·54
1927-28 .	51.07	50,33,179	17,00,085	4,79,585	9·52	1,02,413	3,77,172	7·49	640	71·79
1928-29 .	51·07	51,27,929	16,26,787	5,34,345	10·42	1,19,062	4,15,283	8·09	612	67·15
1929-30 .	51·07	51,40,076	15,83,722	4,98,017	9·69	98,530	3,99,487	7·77	597	68·55
1930-31 .	51·07	51,32,617	15,38,695	4,68,929	9·13	76,025	3,92,904	7·65	579	69·52
1931-32 .	51·07	50,91,217	14,48,987	4,85,878	9·55	80,961	4,04,917	7.95	543	66·47
1932-33 .	51·07	50,19,226	12,58,441	3,11,075	6·19	28,037	2,83,038	5·64	474	75·28
1933-34 .	51·07	50,51,765	12,87,811	4,09,092	8·09	52,635	3,56,457	7·05	484	68·23
1934-35 .	51·07	50,57,721	12,72,716	4,10,447	8·11	37,565	3,72,882	7·37	479	67·75
1935-36 .	51·07	50,30,773	12,59,352	3,80,137	7·51	14,519	3,65,618	7·27	472	69·81
1936-37 .	51·07	50,07,695	12,32,910	3,56,070	7·19	14,169	3,41,901	6·83	464	71·12
1937-38 .	51·07	50,38,760	11,28,756	2,70,178	5·36	..	2,70,178	5·36	425	76·06
1938-39 .	51·07	50,37,986	11,34,026	2,48,711	4·94	13,654	2,35,057	4·66	427	78·07

(*b*) **Darjeeling Himalayan railway extensions** (2′ 0″ gauge)—

Managing Agents.—Messrs. Gillanders Arbuthnot and Company, Calcutta.

Date of registration of the Company.—20th January 1913.

The construction of this line by the Darjeeling-Himalayan Railway Company for the Darjeeling Himalayan Railway Extensions Company was authorised by the Railway Board in their telegram No. 251 R.C., dated the 6th February 1913.

5. DARJEELING HIMALAYAN RAILWAY SYSTEM—*contd.*

(*b*) Darjeeling Himalayan railway extensions (2′ 0″ gauge)—*contd.*

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5
Kishanganj extension—				
Panchanai to Matigara	16-3-14	2·10		
Matigara to Naksalbari	1-2-15	12·15		
Naksalbari to Taiabpur	1-5-15	24·25		
Taiabpur to Islampur-Aluabari	1-11-14	8·60		
Islampur Aluabari to Kishanganj	15-6-14	19·25		
			66·35	
Teesta Valley extension—				
Siliguri to Sevoke	16-3-14	12·75		
Sevoke to Riyang	1-5-15	11·75		
Riyang to Giellekhola	21-9-15	4·59		
			29·09	
GRAND TOTAL	..	..	..	95 41

Details of construction—

Permanent-way.—The permanent-way consists of 40-lb. British standard section steel rails, with a small length of older type of 40-lb. rails, 1·68 miles of 50-lb. and 1·82 miles of 41½-lb. rails laid on sâl sleepers.

Ballast.—The line is ballasted with sand; but broken stone is being laid.

Fencing.—The line is unfenced.

Curves.—The sharpest curve on the Kishanganj extension is of 100 feet radius and that on the Teesta Valley extension, of 80 feet radius.

Gradients.—The steepest gradient is 1 in 100 on the Kishanganj extension and that on the Teesta Valley Extension, 1 in 50.

Contracts and agreement—

Contract, dated the 25th April 1914 (called the principal contract), *between the Secretary of State and the Darjeeling Himalayan Railway Extensions Company* as to the construction, maintenance and working of the Darjeeling Himalayan Railway Extensions by the Company.

Agreement, dated the 21st June 1915, *between the Darjeeling Himalayan Railway Company and the Darjeeling Himalayan Railway Extensions Company*, for the construction, maintenance and working of the extensions by the former.

Contract, dated the 4th April 1918 (supplemental to the contract of 25th April 1914), *between the Secretary of State and the Darjeeling Himalayan Railway Extensions Company*, modifying the terms of the principal contract.

Indenture dated the 15th February 1932 (Supplemental to the agreement dated the 21st June 1915) between the Darjeeling Himalayan Railway Extension Co. Ltd., and the D. H. Railway Co. Ltd., modifying the terms of working.

Indenture dated the 23rd October 1937 (supplemental to the Agreement and indenture dated the 21st June 1915 and 15th February 1932 respectively) between the D. H. Railway Extension Co. Ltd., and the D. H. Railway Co. Ltd., modifying further the terms of working etc.

Main provisions of contracts—

(i) *Land.*—Land in British territory provided free of cost to the Company. The Company is also permitted to make such use of any roads for the purposes of the extensions as the Government of Bengal and Bihar and Orissa may authorise.

(ii) *Government aid.*—The Government allow to the Company, in respect of each year, by way of rebate such a sum not exceeding in any year the net earnings of the Eastern Bengal railway, exclusive of earnings derived from the carriage of revenue stores, from traffic originating or terminating on the extensions, as shall, together with the net earnings of the Company or with half the gross earnings after deducting from such half the sum of Rs. 15,000 payable on account of office expenses and expenses of management, whichever is more, make up an amount equal to interest for the year at a rate of 5 per cent. per annum on the actual expenditure charged in the capital account.

(iii) *Terms of working.*—Up to March 1931 the extensions were worked by the Darjeeling Himalayan Railway Company at 50 per cent. of their gross earnings. As from the 1st April 1931, under a Supplemental Working Agencies Agreement actual expenditure as detailed in clause 2 (*a*) of the supplemental agreement is deducted from the gross earnings of the D. H. Railway extensions Co.

90% of the amount of gross earnings remaining after the above deductions is retained by the D. H. Railway Company as remuneration for the services rendered by it. When calculating the amount of rebate payable by the Secretary of State or the surplus profits divisible with the Secretary of State, the terms of the supplemental agreement will not apply. The calculation will be governed by the terms of the principal contract only.

(iv) *Distribution of profits.*—When the net earnings of the Company shall exceed the minimum amount sufficient to pay a dividend of 5 per cent. per annum such excess shall be divided equally between the Secretary of State and the Company.

(v) *Rates and fares.*—The rates and fares for the carriage of goods and passengers shall be such as may from time to time be arranged between the Secretary of State and the Company and the classification of goods thereon shall be in conformity with that from time to time in force on State railways of a similar gauge; provided that the maxima rates and fares for the Kishanganj extension

5. DARJEELING HIMALAYAN RAILWAY SYSTEM—*concld.*

(*b*) Darjeeling Himalayan railway extensions (2′ 0″ gauge)—*concld.*

Main provisions of contracts—*concld.*

will be double, and the minima rates and fares the same as those permissible on the Eastern Bengal railway; and that the maxima rates and fares for the Teesta Valley Extension will be those stated in schedule "A" attached to the contract, and the minima rates and fares the same as those fixed for the Western Extension of the Bengal Dooars railway.

(vi) *Special obligations as to the conveyance of*—
(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin and the persons in charge thereof.—

The Company shall carry out all such services as are usually performed by State railways of a similar gauge in the same manner and subject to the same regulations and conditions as to rates and otherwise as are for the time being in force on such railways.

(vii) *Power of the Government to determine contract*—The Government may, by giving "notice of purchase", determine the contract, either on the 31st March 1946 or on the 31st March in the last year of any subsequent period of 10 years, by paying to the Company 25 times the amount of the average of the yearly net earnings (excluding payments on account of rebate) of the Company during the 3 years immediately preceding, but so that the total amount so payable to the Company shall not in any case exceed by more than 20 per cent., or be less than, the total capital expenditure of the Company.

The Government may, by giving "notice of special purchase", determine the contract at any time in the following cases:—

(*a*) when it is considered desirable to alter the gauge of the railway;

(*b*) when it is considered desirable to convert the railway into a line of through communication; and

(*c*) when it is considered desirable to extend the railway (without altering the gauge or making the line part of a through route) and the Company is unable or unwilling to provide funds for such extension.

If the contract be determined by "notice of special purchase" the Government will pay to the Company 25 times the average yearly net earnings during the 3 years preceding the purchase or 115 per cent. of the total capital expenditure, whichever may be the greater.

(viii) *Power of the company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vii)].—None specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay including suspense to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from (+), or share of surplus profits payable to (—), Secretary of State.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14	14·28	22,92,311	..	Information not available.						
1914-15	53·62	39,87,838								
1915-16	95·44	45,66,982	1,61,788	80,894	1·77	+ 40,780	1,21,674	2·61	65	50·00
1916-17	95·44	51,10,296	3,32,929	1,66,464	3·26	+1,04,050	2,70,514	5·29	67	50·00
1917-18	95·44	53,77,644	3,71,982	1,85,991	3·46	+ 97,891	2,83,882	5·28	75	50·00
1918-19	95·44	54,48,031	4,34,872	2,17,436	3·99	+ 69,966	2,87,402	5·27	88	50·00
1919-20	95·44	54,64,250	4,64,291	2,32,145	4·25	+ 56,067	2,88,212	5·27	94	50·00
1920-21	95·44	54,86,131	4,93,221	2,46,610	4·49	+ 47,143	2,93,753	5·35	100	50·00
1921-22	95·44	55,21,355	4,58,392	*2,14,196	3·88	+ 61,872	2,76,068	5·00	92	50·00
1922-23	95·44	55,31,981	5,76,435	*2,73,218	4·94	+ 3,381	2,76,599	5·00	116	50·00
1923-24	95·44	55,50,994	5,43,334	*2,56,667	4·62	+ 40,930	2,97,597	5·36	109	50·00
1924-25	95·44	55,76,900	6,11,564	*2,90,782	5·21	— 658	2,90,124	5·20	123	50·00
1925-26	95·44	56,39,898	6,25,284	*2,97,642	5·27	— 2,832	2,94,810	5·22	126	50·00
1926-27	95·44	56,83,417	6,37,161	*3,03,580	5·34	— 4,350	2,99,230	5·26	129	50·00
1927-28	95·44	57,53,584	†6,03,793	‡2,75,838	4·79	+ 11,841	2,87,679	5·00	122	50·00
1928-29	95·44	57,67,070	†5,98,378	*2,84,189	4·93	+ 4,164	2,88,353	5·00	121	50·00
1929-30	95·44	57,79,119	5,77,308	*2,76,417	4·78	+ 12,539	2,88,956	5·00	116	50·00
1930-31	95·44	57,79,694	5,00,627	*2,36,717	4·09	+ 52,267	2,88,984	5·00	100	50·00
1931-32	95·44	57,82,278	4,21,673	*90,173	1·55	+ 93,009	1,83,182	3·16	82	75·06
1932-33	95·44	57,82,231	4,01,591	*68,969	1·19	+1,03,045	1,72,014	2·97	78	79·09
1933-34	95·44	57,89,286	3,85,126	*55,794	0·96	+1,12,090	1,67,884	2·90	75	81·62
1934-35	95·44	57,94,133	4,53,061	*1,20,418	2·08	+ 78,296	1,98,714	3·43	88	70·11
1935-36	95·44	58,01,004	5,21,802	*1,70,969	2·95	+ 44,298	2,15,267	3·71	101	64·36
1936-37	95·44	58,08,939	5,62,712	*2,31,690	3·99	+ 23,337	2,55,027	4·39	109	56·16
1937-38	95·44	58,22,564	5,46,073	*1,45,767	2·50	+ 33,855	1,79,622	3·08	105	70·54
1938-39	95·44	58,49,559	5,79,687	*1,98,731	3·40	+ 17,990	2,16,721	3·70	111	63·13

N.B.—The Revenue figures against 1915-16 are for the half-year ending 31st March 1916, as those for the previous half year were credited to capital.

* After payment of management expenses, *viz.*, Rs. 15,000.

† Excludes earnings of carriage of revenue stores.

‡ After payment of management expenses and Super Tax.

6. DIBRU-SADIYA RAILWAY SYSTEM.

Chairman.— E. A. A. JOSEPH, ESQ.

Secretary.—S. MACLEAN JACK, ESQ.

Offices.—154/156, Fen Church Street, London, E. C. 2.

Date of registration of the Company.—30th July 1881.

Lines comprised in the system—The Dibru-Sadiya railway system is made up of—

	Miles
(*a*) Dibru-Sadiya railway (3′ 3⅜″ gauge)	85·61
(*b*) Ledo and Tikak-Margherita Colliery railway (3′ 3⅜″ gauge)	5·50
Total	91·11

(*a*) Dibru-Sadiya railway (3′ 3⅜″ gauge)—

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Lower steamer ghat on the left bank of the Brahmaputra river, near Dibrugarh Bazar, eastward as far as the Dinjan stream	15-8-82	14·59		
Dinjan stream to Makum Junction	16-7-83	23·50		
Makum Junction to Dihing Bridge	2-5-84	23·00		
			61·09	
Dum Duma branch—				
Makum Junction to Dum Duma	2-5-84	10·00		
Dum Duma to Talap	5-2-85	6·00		
			16·00	
Saikhoa extension—				
Talap to Saikhoa Ghat	1-5-10	8·52		
			8·52	
GRAND TOTAL	..	..	..	85·61

Details of construction—

Permanent-way.—Of the main line 25·51 miles are laid with 75-lb., 32·49 miles with 60-lb. and the remainder with 50-lb. flat-footed steel rails laid on Nahor, Ajhar and Hollong oil-treated sleepers and cast-iron plates of the Denham-Olpherts' type. The Dum Duma branch and Saikhoa extension are laid with 50-lb. rails on Nahor and Hollong oil-treated sleepers.

Ballast.—The main line is ballasted throughout, and the branch line partially, with broken stone.

Fencing.—The line is unfenced, with the exception of a short length at Dibrugarh.

Curves.—The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient is 1 in 140 on the main line and 1 in 100 on the Saikhoa extension.

Contracts—

Contract, dated the 26th May 1880 (called the principal contract), *between the Secretary of State and the Assam Railway Company*, subsequently called the Assam Railways and Trading Company, as to the construction, maintenance, management and working of the Dibru-Sadiya railway with branches.

Contract, dated 25th July 1881 (supplemental to that of 1880), *between the Secretary of State and the Assam Railways and Trading Company*, modifying the contract of 1880 and providing that the Company shall have the preferential option for the construction and working of any other line(s), in the Lackimpore District—an option which has since been surrendered in consideration of an undertaking by the Secretary of State that the Government right of purchase shall not be exercised until after 1910, *vide* letter from the India Office to the Company's London Board, No. 2193 dated the 13th December 1898.

Letter No. P.W.-$\frac{923}{1758}$-, dated the 31st March 1905, *from the Honourable the Chief Commissioner of Assam, to the Government of India in the Department of Commerce and Industry*;
Telegram No. R.P.-5, dated the 11th May 1905, *from the Railway Board, to the Honourable the Chief Commissioner of Assam*;
} as to the construction of the Saikhoa extension.

Contract, dated the 28th October 1914 (supplemental to those of 1880), *between the Secretary of State and the Assam Railways and Trading Company*, as to the maintenance and working of the Saikhoa extension, the alteration in the date for the exercise of the option of purchase of the Company's railway and the adoption of the Government Financial year for the preparation of accounts.

Contract, dated the 14th January 1920 (supplemental to those of 1880, and 1914), *between the Secretary of State and the Assam Railways and Trading Company*, as to the extension of the period after which the Secretary of State may exercise the option of purchasing the line and certain other matters.

6. DIBRU-SADIYA RAILWAY SYSTEM—*contd.*

(*a*) **Dibru-Sadiya railway** (3′ 3⅜″ gauge)—*concld.*

Main provisions of contracts—

(i) *Land.*—Provided by the Government free of cost to the Company.

(ii) *Government aid.*—Annual subsidy on the main line for 20 years from the date of opening, not exceeding Rs. 80,000 in any one year, or such smaller sum as, added to net earnings of the main line, will make up 5 per cent. on the paid-up capital (exclusive of the cost of Makum branch).

Annual subsidy on the Makum Branch for 20 years from the date of opening, not exceeding Rs. 20,000 in any one year, or such smaller sum as, added to the net earnings of the branch, will make up 5 per cent. on the capital cost.

Annual subsidy on the Saikhoa extension for 10 years from the date of opening at the rate of Rs. 600 per mile.

The subsidies are subject to deduction if the Company fail to keep the line in good order and properly equipped, and to work it.

[*Note.*—The period of subsidy for the main line and Makum branch terminated as from the 30th June 1903, *vide* letter from the Honourable the Chief Commissioner of Assam in the Public Works Department to the Examiner of Public Works Accounts, Assam, No. 1739 P. W. 12898, dated the 11th June 1894, and that for the Saikhoa extension, from September 1920.]

(iii) *Distribution of profits.*—All the profits go to the Company.

(iv) *Rates and fares.*—To be approved by the Government. If, after five years from the date of opening of the main line, the net profits of the Company exceed 12 per cent. of their paid-up capital, the Government may require the Company to make such reduction in their rates and fares as shall not lead to a diminution of the net profits below 12 per cent.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, high Government officials and Government stores.—To be conveyed at rates to be agreed upon from time to time, not exceeding those now paid in the district concerned.

(*b*) Government bullion and coin, and the persons in charge thereof.—Not specified

(vi) *Power of the Government to determine contract.*—If the Company fail, for a period extending over six months, to observe its obligations, the Government may determine the contract and call upon the Company to restore the land, etc., made over to it. The Government has the option of purchasing the railway, and its rolling stock and other equipments and property of the Company at intervals of ten years from the 5th February 1921, on giving one year's notice and paying 20 per cent. in excess of the value of the property as a dividend paying investment.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi) *or* (vii)].—None specified

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from local Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14	86·02	1,09,70,066	13,54,970	6,03,160	5·50	5,112	6,08,272	5·54	303	55·49
1914-15	86·02	1,11,66,228	12,92,241	4,88,264	4·37	5,112	4,93,376	4·42	289	62·21
1915-16	86·02	1,14,19,380	14,18,809	5,51,050	4·83	5,112	5,56,162	4·87	317	61·16
1916-17	86·02	1,16,14,769	14,26,539	5,57,813	4·81	5,112	5,62,925	4·85	319	60·90
1917-18	86·02	1,17,38,173	14,40,889	5,00,091	4·26	5,112	5,05,203	4·34	322	65·29
1918-19	86·02	1,20,55,740	13,78,079	4,75,321	3·94	5,112	4,80,433	3·98	308	65·51
1919-20	86·02	1,21,75,421	14,79,731	4,32,281	3·55	5,112	4,37,393	3·59	330	70·78
1920-21	86·02	1,22,03,585	15,88,178	3,63,404	2·98	5,112	3,68,516	3·02	335	77·12
1921-22	86·02	1,24,11,586	17,16,337	4,77,645	3·85	..	4,77,645	3·85	383	72·17
1922-23	86·02	1,24,36,316	19,37,876	5,96,940	4·80	..	5,96,940	4·86	433	69·20
1923-24	86·02	1,26,02,000	20,36,270	5,25,152	4·17	..	5,25,152	4·17	455	74·21
1924-25	86·02	1,32,15,535	24,47,363	8,83,613	6·68	..	8,83,613	6·68	547	63·90
1925-26	86·02	1,39,41,549	25,55,317	11,88,334	8·53	..	11,88,334	8·53	571	53·50
1926-27	86·02	1,40,86,961	28,80,089	13,94,866	9·90	..	13,94,866	9·90	644	51·57
1927-28	86·02	1,27,35,212	29,26,712	13,52,874	10·62	..	13,52,874	10·62	654	53·77
1928-29	86·02	1,47,44,632	26,58,908	13,10,932	8·89	..	13,10,932	8·89	594	50·70
1929-30	86·02	1,48,28,290	28,42,883	14,47,004	9·76	..	14,47,004	9·76	635	49·10
1930-31	86·02	1,52,32,708	29,61,672	15,28,099	10·03	..	15,28,099	10·03	662	48·40
1931-32	86·02	1,53,86,132	23,46,552	10,48,819	6·82	..	10,48,819	6·82	525	55·30
1932-33	86·02	1,52,95,714	21,05,048	9,41,174	6·15	..	9,41,174	6·15	471	55·29
1933-34	86·02	1,53,16,029	19,15,097	7,62,457	4·97	..	7,62,457	4·97	428	60·19
1934-35	86·02	1,53,62,680	19,91,949	7,61,780	4·96	..	7,61,780	4·96	445	61·76
1935-36	86·02	†1,52,23,996	19,09,951	7,20,959	4·74	..	7,20,959	4·69	427	62·25
1936-37	86·02	†1,51,81,145	17,77,166	5,94,585	3·92	..	5,94,585	3·92	397	66·54
1937-38	86·02	†1,50,33,240	19,88,696	8,86,183	5·89	..	8,86,183	5·89	445	55·44
1938-39	85·61	†1,49,24,471	20,11,820	8,69,020	5·82	..	8,69,020	5·82	452	56·80

†Excludes Rs. 1,50,000 (£10,000) representing the estimated cost of stores, etc. for the purpose of arriving at the amount of Govt. Subsidy due to the D. S. Ry. in years when a subsidy was payable.

6. DIBRU-SADIYA RAILWAY SYSTEM—*contd.*

(*b*) Ledo and Tikak-Margherita Colliery railway (3′ 3⅜″ gauge)—

This line was constructed by the Assam Railways and Trading Company in 1883, under the sanction of a concession granted in an Indenture made with the Secretary of State on the 30th July 1881, and was used originally only for the purpose of bringing coal from the mines on the south bank of the Dihing river to connect with the Dibru-Sadiya railway. It was constituted a railway and its working was taken over by the Dibru-Sadiya railway from the 1st January 1897.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Dihing bridge to Ledo	17-2-84	5·50	5·50

Details of construction—

Permanent-way.—The line is laid with 75-lb. flat-footed steel rails on Nahor and Hollong oil-treated sleepers.

Ballast.—The line is ballasted with broken stone.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 750 feet radius.

Gradients.—The ruling gradient is 1 in 115.

Contract—

Letter *from the Government of India* in the Public Works Department, No. 623-R.T., dated the 6th August 1896, as to the carriage of goods over the Company's Colliery line and for the through booking of the same with stations on the Dibru-Sadiya railway.

Resolution by the *Government of India* in the Public Works Department, No. 234-R.T., dated the 11th March 1897, as to the application of the general rules for working open lines of railway to the Company's Colliery line.

Main provisions of contract—

(i) *Land.*—Mines and premises leased to the Company at a fixed half-yearly rental, or in lieu of such rent a certain royalty on the output of coal.

(ii) *Government aid.*—Nil.

(iii) *Terms of working.*—All charges for working the open line system are divided between the Dibru-Sadiya railway and the Colliery branch in proportion to their respective gross earnings. For hire of rolling-stock provided by the Dibru-Sadiya railway, 5 per cent. of gross earnings are charged to the Colliery.

(iv) *Rates and fares.*—Certain station to station goods rates have been approved in the Government of India letter noted above.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Not specified.

(vi) *Power of the Government to determine contract.*—The Government may determine the contract and take possession of the mines if the Company fail to fulfil its obligations. On the termination of the contract the Government may purchase buildings and works at a fair valuation.

(vii) *Power of the Company to determine contract.*—The Company may determine the contract if the mines become destroyed or are rendered unfit through any extraordinary casualty. On the termination of the contract the Company is to take away all machinery, etc., belonging to the mines and the railways or tramways constructed for the purpose of working the mines, unless the Government shall be willing to purchase the same.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract.*—Thirty years from the 30th July 1931.

8. DIBRU-SADIYA RAILWAY SYSTEM—*concld.*

(*b*) Ledo and Tikak-Margherita Colliery railway (3′ 3⅜″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix I to the Report for 1913-14).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs		Rs.	
1913-14 . . .	5·50	16,94,069	92,068	40,821	2·41	322	55·66
1914-15 . . .	5·50	16,94,069	99,609	38,190	2·25	348	61·65
1915-16 . . .	5·50	16,94,069	96,680	37,755	2·23	338	60·95
1916-17 . . .	5·50	16,94,069	94,080	36,149	2·13	329	61·53
1917-18 . . .	5·50	16,94,069	94,876	32,856	1·94	332	65·37
1918-19 . . .	5·50	16,94,069	87,302	30,574	1·80	305	64·98
1919-20 . . .	5·23	16,94,069	93,018	50,221	2·96	342	46·01
1920-21 . . .	5·23	16,94,069	1,03,183	24,334	1·43	379	76·42
1921-22 . . .	5·23	16,94,069	1,02,725	29,247	1·73	378	71·52
1922-23 . . .	5·23	16,94,069	1,05,001	32,090	1·89	386	69·36
1923-24 . . .	5·50	16,94,069	97,375	24,779	1·47	340	74·55
1924-25 . . .	5·50	16,94,069	1,23,095	47,988	2·83	430	61·02
1925-26 . . .	5·50	16,94,069	1,07,942	49,025	2·89	377	54·58
1926-27 . . .	5·50	16,94,069	1,52,538	71,951	4·25	533	52·83
1927-28 . . .	5·50	16,94,069	1,63,859	73,365	4·33	573	55·23
1928-29 . . .	5·50	16,94,069	1,69,789	82,206	4·85	594	51·58
1929-30 . . .	5·50	16,94,069	1,83,020	89,983	5·31	640	50·83
1930-31 . . .	5·50	16,94,069	2,05,620	1,02,346	6·04	719	50·23
1931-32 . . .	5·50	16,94,069	1,21,402	52,334	3·09	424	56·89
1932-33 . . .	5·50	16,94,069	1,02,224	44,725	2·64	357	56·25
1933-34 . . .	5·50	16,94,069	1,03,639	40,542	2·36	362	60·88
1934-35 . . .	5·50	16,94,069	1,07,616	40,432	2·39	376	62·43
1935-36 . . .	5·50	16,94,069	1,18,339	44,205	2·61	414	62·64
1936-37 . . .	5·50	18,59,035	1,05,015	34,991	1·88	367	66·68
1937-38 . . .	5·50	18,82 387	1,32,704	57,731	3·07	464	56·50
1938-39 . . .	5.50	18,88,875	1,52,495	64,425	3·42	533	57·75

7. GAEKWAR'S BARODA STATE RAILWAYS SYSTEM.

Lines comprised in the system.—The Gaekwar's Baroda Stte a railway system is made up of :—

	Open lines. Miles.	Under construction or sanctioned for construction. Miles.	Total Miles.
(*a*) Gaekwar's Baroda State Railway (3′ 3⅜″ gauge)	255·12	..	255·12
(*b*) Gaekwar's Baroda State railways (2′ 6″ gauge)	333·06	..	333·06
(*c*) Khijadia-Dhari Railway (3′ 3⅜″ gauge)	37·46		53·11
Prachi Road Kodinar Railway (3′ 3⅜″ gauge)	15·65		
(*d*) Bodeli-Chhota Udaipur railway (2′ 6″ gauge)	22·67	..	22·67
Total	663·96		663·96

Running powers—

Foreign lines over home line :—

Metre gauge—

	Miles.
Mehsana to Viram Gaon, Gaekwar Baroda State Railway (for goods trains only)	39·09

(*a*) Gaekwar's Mehsana railway (3′ 3⅜″ gauge)—

The lines are the property His Highness the Maharaja Gaekwar Baroda. They were worked by the B. B. and C. I. Railway Company, upto the 31st March 1933 after which date the maintenance and working were taken over by the Durbar.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Viramgam-Mehsána-Tarangá Hill section—				
Viramgam to Mehsáná	1-2-91	40·21		
Mehsáná to Vadnagar	21-3-87	20·73		
Vadnagar to Kherálu	12-12-88	6·86		
Kherálu to Taranga Hill	20-8-09	7·58	75·38	
Kakosi extension—				
Mehsána to Pátan	20-7-91	24·69		
Pátan to Wagrod	15-1-15	14·72		
Wagrod to Kakosi	28-5-16	9·92	49·33	
Harij branch—				
Manund Road to Harij	23-10-08	21·01	21·01	
Bhoyani Road extension—				
Chanasma to Bechraji	23-10-08	16·58		
Bechraji to Katosan Road	1-5-20	15·18		
Katosan Road to Bhoyani Road	1-3-21	5·99	37·75	
Vijapur-Kadi-Bhoyani Road extension—				
Vijapur to Kálol	10-6-02	29·22		
Kálol to Kadi	13-7-03	11·93		
Kadi to Bhoyani Road	1-4-12	4·74		
Vijapur to Ambaliason	1-10-28	25·76	71·65	
GRAND TOTAL OPEN MILEAGE	..	..		255·12

Details of construction—

Permanent-way.—The branches and extensions are laid with 41¼-lb. flat-footed steel rails on wooden sleepers, except 40·21 miles which have been laid with second hand 50-lb. steel rails and 27 miles have been laid with new 50-lb. rails on steel and wooden sleepers.

Ballast.—The line is ballasted with stone, lime stone and kunkur.

Fencing.—Of the Manund Road-Harij, Chanasma-Bechraji and Vijapur-Kadi-Bhoyani Road sections only the station yards are fenced ; and of the other sections about 32 miles are fenced with wire, and the rest with cactus, but this latter has in several places been entirely destroyed by floods and locusts and what remains is much broken up.

Curves.—The sharpest curve is of 1,432 feet radius.

Gradients.—On the Mehsáná-Kherálu and Vijapur-Kadi sections the ruling gradient is 1 in 150, except for 5,100 feet between Varetha and Taranga Hill, where it is 1 in 75. On the Mehsáná-Viramgam section it is 1 in 300, except for 800 feet between mile 0 and 1 and 1,350 feet between miles 5 and 6, where it is 1 in 200. On the Mehsáná-Patan section it is 1 in 400, except for 850 feet between miles 6 and 7, where it is 1 in 200. On the Patan-Wagrod section it is 1 in 150, on the Manund Road-Harij and Kadi-Bhoyani Road sections, 1 in 200 and on the Chanasma-Bechraj section, 1 in 366.

Agreement—

The line is owned and worked by the Baroda State.

7. GAEKWAR'S BARODA STATE RAILWAYS SYSTEM—*contd.*

(*a*) Gaekwar's Mehsana railway (3′ 3⅜″ gauge)—*contd.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Includes the Khijadia-Dhari-Railway figures from 1934-35.

Year.	Mileage open at end of each year.		Total capital outlay, including suspense to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.		Gross earnings.		Net earnings.		Percentage of net earnings on total capital outlay given in columns 4 and 5.		Earnings per mile per week.		Proportion of expenses to earnings.	
	Mehsana Railway.	Vijapur Bhoyani Road section.	Mehsana Railway.	Vijapur Bhoyani Road Section.	Mehsana Railway.	Vijapur Bhoyani Road section.	Mehsana Railway.	Vijapur Bhoyani Road section.	Mehsana Railway.	Vijapur Bhoyani Road section.	Mehsana Railway.	Vijapur Bhoyani Road section.	Mehsana Railway.	Vijapur Bhoyani Road section.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Miles	Miles.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.			Rs	Rs.		
1913-14 .	138·06	46·11	57,80,979	15,71,787	6,58,961	1,45,014	3,30,495	72,768	5·72	4·63	92	60	49·85	49·82
1914-15 .	152·72	46·11	66,46,657	16,02,858	7,07,195	1,63,126	3,37,010	77,712	5·07	4·85	96	66	52·35	52·36
1915-16 .	152·72	46·11	64,67,495	16,31,527	7,14,241	1,63,238	3,72,108	85,045	5·75	5 21	90	68	47·90	47·90
1916-17 .	162·63	46·11	68,97,803	18,92,634	7,35,224	1,56,316	4,21,341	89,339	6·11	4·72	88	65	42·69	42·85
1917-18 .	162·63	46 11	69,03,986	21,06,018	8,30,887	1,51,600	4,64,141	84,762	6·72	4·02	98	63	44·14	44·09
1918-19 .	162·63	46·11	69,34,331	22,97,018	12,23,327	1,87,569	6,85,776	1,04,751	9·89	4·56	145	78	43·94	44·15
1919-20 .	208·74		85,84,329		13,71,581		6,13,450		5·32		126		55·27	
1920-21 .	230·88		99,73,321		14,74,374		4,81,103		4·82		127		67·34	
1921-22 .	230·25		1,00,15,434		15,66,798		3,76,974		3·76		131		75·94	
1922-23 .	230·25		1,00,66,144		19,13,796		5,83,525		5·80		160		69·51	
1923-24 .	230·25		1,01,15,156		19,69,113		7,99,914		7·91		165		59·38	
1924-25 .	230·25		1,02,62,489		19,36,170		8,24,810		8·03		162		57·40	
1925-26 .	230·25		1,03,12,546		20,09,243		7,78,179		7·55		168		61·27	
1926-27 .	230·25		1,03,95,941		17,78,553		6,61,618		6·36		148		62·80	
1927-28 .	230·25		1,05,92,975		19,94,336		7,59,226		7·17		167		61·93	
1928-29 .	256·01		1,17,24,418		22,26,778		9,43,293		8·05		167		57·64	
1929-30 .	256·01		1,17,95,043		20,82,999		8,08,528		6·85		156		61·18	
1930-31 .	256·01		1,20,25,024		20,66,267		7,16,822		5·96		155		65·31	
1931-32 .	256·09		1,22,06,677		18,83,206		7,51,356		6·15		141		60·10	
1932-33 .	254·82		1,21,82,317		20,64,627		8,79,967		7·22		156		57·38	
1933-34 .	255·12		1,49,30,496		21,24,573		11,24,518		7·53		160		47·07	
1934-35 .	292·58		1,72,94,573		23,33,618		9,95,736		5·79		153		57·33	
1935-36 .	292·58		1,77,99,101		23,05,219		8,94,177		5·09		151		61·21	
1936-37 .	292·58		1,80,89,593		21,95,135		7,66,771		4 24		144		65·07	
1937-38 .	292·58		1,84,26,948		22,68,940		7,64 919		4·15		149		66·29	
1938-39 .	308·23		1,85,46,626		24,64,578		9,47,523		5·11		153		61·55	

(*b*) Gaekwar's Baroda State railways (2′ 6″ gauge)—

The lines are the property of His Highness the Maharaja Gaekwar of Baroda. They were worked by the Bombay, Baroda and Central India Railway Company up to the 30th September 1921, after which date the maintenance and working were taken over by the Durbar.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Dabhoi Section—				
Chandod-Dabhoi-Jambusar branch—				
Chandod to Dabhoi	15-4-79	10·55		
Dabhoi to Goya Gate	1-7-80	16·83		
Goya Gate to Vishvamitri	24-1-81	2·02		
Vishvamitri to Padra	1-7-97	6·63		
Padra to Mobha	10-7-03	9·21		
Mobha to Masor Road	1-11-04	6·49		
Masor Road to Jambusar	1-5-17	7·31		
			59·04	
Timba branch—				
Dabhoi to Jarod	15-11-13	23·84		
Jarod to Samlaya	13-12-15	5·32		
Samlaya to Timba	1-2-19	33·54		
			62·70	
Bodeli extension—				
Dabhoi to Gojapur Bahadarpur	17-9-79	9·58		
Gojapur Bahadarpur to Bodeli	16-6-90	12·66		
			22·24	
Miyagam-Dabhoi branch—				
Miyagam to Dabhoi	8-4-73	20·00		
			20·00	
Miyagam-Malsar extension				
Miyagam to Malsar	15-1-12	23·67		
			23·67	
Choranda-Koral branch—				
Choranda to Koral	18-11-21	11·62		
			11·62	
Motipura-Tankhala branch—				
Motipura (Chhuchhapura) to Tankhala	15-3-23	23·82	23·82	
Total Dabhoi section	..	..	223·09	
Carried over	..	..	223·09	

7. GAEKWAR'S BARODA STATE RAILWAYS SYSTEM—*contd.*

(*b*) Gaekwar's Baroda State railways (2′ 6″ gauge)—*contd.*

Progress in opening—*concld.*

Sections of Railway.	Date of opening.	Miles.	Total.	Grand Total.
1	2	3	4	5
Brought forward .	..	..	223·09	..
Bilimora-Kala-Amba section—				
Bilimora to Rankuwa	23-7-14	13·34		
Rankuwa to Unai	22-1-15	12·67		
Unai to Kalamba	1-5-17	8·98		
Kalaamba to Dungardo	1-4-26	2·14		
Dungardo to Waghai	1-11-29	1·97		
Total Bilimora-Waghai section .	..	..	39·11	
Kosamba-Zankhvav section—				
Kosamba to Zankhvav	1-5-12	26·10		
Zankhvav to Umarpada	1-7-29	12·59		
Total Kosamba-Zankhvav section .	..	..	38·69	
Petlad-Pihij section—				
Petlad to Vaso	10-12-14	15·11		
Vaso to Pihii	17-4-15	3·65		
Total Petlad-Pihij section .	..	..	18·76	
Petlad-Bhadran section—				
Petlad to Bhadran	1-6-22	13·41		
Total Petlad-Bhadran section .	..	..	13·41	
Grand total open mileage .	..	.	..	333·06

Details of construction—

Permanent-way.—On the Dabhoi section the line is relayed with 41½-lb. flat-footed steel rails on wooden sleepers except the following:—

½ mile of Choranda Koral Railway is laid with 30-lb. flat-footed rails. Masar Road-Jambusar-Miyagam Malsar, Dabhoi-Timba and Motipura-Tanakhala Railways are laid with 30 lbs. flat-footed rails on wooden Rectangular sal and half-round top sawn teak sleepers.

On the Bilimora-Waghai, Petlad-Pihij and Petlad-Bhadran sections, the line is laid with 30-lb. flat-footed steel rails and wooden rectangular sal, half-round teak and half-round top sawn sleepers except Dungarda to facing point of Waghai Station yard which is of 31-lb. rails.

The Kosamba-Zankhvav-Umarpada section is laid with 41½-lb. steel rails and half-round jungle teak and Zarrah sleepers, with rectangular sal and half-round top sawn sleepers except Keori and Umarpada section yards which are laid with 31-lbs. rails.

Ballast.—The Dabhoi, Bilimora-Waghai, Petlad-Pihij, Petlad-Bhadran and Kosamba Umarpada sections are ballasted with sand, gravel or moorum with metal blinding on sand or shingle in places.

Fencing.—Only the station yards of the Dabhoi, Petlad-Pihij and Petlad Bhadran sections are fenced. The rest of the lines are unfenced.

Curves.—The sharpest curve has a radius of 361 feet on the Petlad-Pihij line, of 500 feet on the Dabhoi line, of 600 feet on the Kosamba-Umarpada line and of 716 feet on the Bilimora-Waghai line.

Gradients.—The ruling gradient is 1 in 400 on the Dabhoi line, with small lengths of 1 in 100, 1 in 150, 1 in 193, 1 in 200 and 1 in 300, 1 in 500 on the Petlad-Pihij, 1 in 200 on Petlad-Bhadran line. 1 in 150 on the Bilimora-Dungarda line, 1 in 100 on Dungarda to Waghai, 1 in 200 on the Kosamba-Zankhvav line, with short lengths of 1 in 150, 1 in 125, 1 in 100, and 1 in 80 on Zankhvav-Umarpada extensions.

7. GAEKWAR'S BARODA STATE RAILWAYS SYSTEM—*contd.*

(*b*) Gaekwar's Baroda State railways (2′ 6″ gauge)—*concld.*

Agreement—

Nil.—The line is owned and worked by the Baroda State.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	168·10	56,57,433	6,92,753	3,25,163	5·75	79	53·06
1914-15	209·92	81,16,249	7,45,714	3,20,837	3·97	68	56·97
1915-16	218·86	97,43,476	8,25,688	3,25,890	3·45	72	60·53
1916-17	218·65	1,14,77,609	8,91,907	3,73,894	3·26	78	58·08
1917-18	234·22	1,35,22,422	9,43,030	4,19,576	3·10	77	55·50
1918-19	267·83	1,38 68,647	12,97,789	5,97,385	4·31	93	53·97
1919-20	267·58	1,46,69,424	13,13,001	3,62,341	2·47	94	72·40
1920-21	267·63	1,51,44,766	13,87,233	3,29,299	2·17	100	76·26
1921-22	279·25	1,80,83,521	12,87,964	1,46,852	0·81	89	88·60
1922-23	316·36	2,20,80,560	18,40,328	6,13,432	2·78	112	66·67
1923-24	315·73	2,31,54,244	23,12,492	6,13,920	2·65	140	73·41
1924-25	316·36	2,44,05,878	25,52,470	7,15,523	2·93	155	71·97
1925-26	316·36	2,54,83,722	27,80,867	9.01,968	3·54	169	67·57
1926-27	318·50	2,65,91,189	21,41,423	3,15,556	1·19	129	85·26
1927-28	318·50	2,89,97,890	22,14,699	2,54,439	0·88	134	88·52
1928-29	318·50	2,91,73,436	24,27,358	2,80,038	0·96	146	88·44
1929-30	333·06	2,98,25,048	22,92,579	5,21,978	1·75	132	77·23
1930-31	333·06	2,99,77,687	21,13,309	3,37,772	1·12	122	84·01
1931-32	333·06	3,00,83,341	20,64,042	3,69,834	1·23	119	82·08
1932-33	333·06	3,02,86,890	22,84,671	6,60,681	2·18	132	71·08
1933-34	333·06	3,03,66,240	22,83,341	6,53,388	2·15	132	71·38
1934-35	333·06	3,06,96,873	21,38,692	5,24,758	1·71	123	75·46
1935-36	333·06	3,06,86,950	21,22,182	5,58,135	1·82	122	73·70
1936-37	333·06	3,06,75,308	22,37,354	6,49,879	2·12	129	70·95
1937-38	333·06	3,06,35,213	21,72,345	6,34,929	2·07	125	70·77
1938-39	333·06	3,05,61,174	22,56,754	6,77,526	2·22	130	69·97

(*c*) Khijadia-Dhari and Prachi Road-Kodinar Railway (3′ 3⅜″ gauge)—

Khijadia-Dhari :—The construction of this line by the Baroda Durbar was sanctioned by the Secretary of State for India in his despatch No. 16-Railway, dated the 7th February 1913, and up to 31st March 1934 it was maintained and worked by the Gondal Railway after which its maintenance and working were taken over by the Gaekwar's Baroda State Railway, with effect from 1st April 1934.

Prachi Road-Kodinar :—The construction of this line was sanctioned by the Government of India, *vide* Railway Board's Notification No. 387-W. of 30th August 1934. This is mantained and worked by the Gaekwar's Baroda State Railway.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Khijadia to Gavadka	1-3-13	16·50	
Gavadka to Chalala	10-3-14	9·20	
Chalala to Dhari	27-5-16	11·76	
		37·46	
Prachi Road to Kodinar	6-4-38	15·65	
Grand Total	..	..	53·11

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lb. flat-footed steel rails laid on deodar and jodka teak sleepers on Khijadia-Dhari Railway and 50-lb. second-hand steel rails laid on wooden sleepers on Prachi Road-Kodinar Railway.

Ballast.—The line is ballasted partly with moorum and partly with stone.

Fencing.—The station platforms only are fenced.

Curves.—The sharpest curve has a radius of 1,910 feet on Khijadia-Dhari Railway and 1,146 feet on Prachi-Road-Kodinar Railway.

Gradients.—The ruling gradient is 1 in 100.

7. GAEKWAR'S BARODA STATE RAILWAYS SYSTEM—*contd.*

(c) Khijadia-Dhari and Prachi Road-Kodinar Railway (3′ 3⅜″ gauge—*contd.*

Agreement—

The line Khijadia-Dhari was constructed by the Baroda Durbar at its own cost. Up to 31st March 1934, it was maintained and worked by the Gondal railway under the following terms :—

Actual expenditure, on maintenance of way, works, stations and Police.

For other heads of expenditure, the same percentage as on the Gondal Railway proper but subject to a minimum of 45 per cent. and a maximum of 55 per cent. of the gross earnings. It is maintained and worked by Gaekwar's Baroda State Railway since 1st April 1934.

Prachi Road-Kodinar Railway is owned and worked by the Borada State.

Statistics of working. (Those for 1st quarter of 1913 will be found in Appendix 1 to the Railway Administration Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in Column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14 . .	25·53	13,65,967	28,940	14,940*	1·09	33	48·38
1914-15 . .	25·53	16,64,256	49,441	23,550	1·42	37	52·34
1915-16 . .	25·53	19,12,637	47,522	2,710	0·24	36	94·30
1916-17 . .	37·22	19,55,078	69,132	18,420	0·94	38	73·36
1917-18 . .	37·22	19,54,370	82,997	13,013	0·67	43	84·32
1918-19 . .	37·22	19,55,180	1,19,726	41,359	2·11	62	65·46
1919-20 . .	37·22	19,91,656	1,18,167	39,213	1·97	61	66·82
1920-21 . .	37·22	19,91,568	1,16,133	27,935	1·40	60	75·95
1921-22 . .	37·22	19,91,556	1,14,332	30,200	1·52	59	73·59
1922-23 . .	37·22	19,83,033	1,21,443	25,002	1·26	63	79·41
1923-24 . .	37·22	19,91,311	1,28,751	21,998	1·10	67	82·91
1924-25 . .	37·22	20,01,589	1,42,142	21,332	1·07	73	84·99
1925-26 . .	37·22	20,05,668	1,39,249	25,248	1·26	72	81·86
1926-27 . .	37·22	20,05,668	1,35,445	19,725	0·98	70	85·44
1927-28 . .	37·22	20,05,668	1,43,207	50,498	2·52	74	64·74
1928-29 . .	37·22	20,05,668	1,42,165	46,130	2·30	73	67·55
1929-30 . .	37·22	20,20,250	1,33,676	50,804	2·51	69	62·00
1930-31 . .	37·22	20,20,250	1,15,154	5,084	0·25	59	95·58
1931-32 . .	37·22	20,20,250	1,00,829	—17,396	—0·86	52	117·25
1932-33 . .	37·22	20,23,868	1,19,499	1,646	0·08	62	98·62
1933-34 . .	37·22	20,32,212	1,58,223	54,003	2·66	82	65·87
1934-35§ . .	§	§	§	§	§	§	§

* Excluding expenses on maintenance of way, works and stations borne directly by the Baroda Durbar in its Capital account.

§ The statistics of working, from 1934-35, are included in the Gaekwar's Mehsana Railway.

(d) Bodeli-Chhota Udaipur railway (2′ 6″ gauge)—

This line is the joint property of the Baroda and Chhota Udaipur Durbars. It was constructed by the Bombay, Baroda and Central India Railway Company and worked by that agency up to the 30th September 1921, after which date the maintenance and working were taken over by the Baroda Durbar.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Badeli to Chhota Udaipur	1-12-17	22·67	22·67

Details of construction—

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed rails laid on half-round teak rectangular sal, and half-round teak top-sawn sleepers.

Ballast.—The line is ballasted with sand and metal blinding on sand in places.

Fencing.—The line is fenced at important level crossings only.

Curves.—The sharpest curve is of 818 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Agreement—

The line is to remain the joint property of the two Durbars and to be debited, for maintenance and working expenses, including cost of supervision and hire of rolling-stock, with the same percentage of gross earnings as may be incurred on the entires System for 12 years from the date of opening to the 31st March 1930, or until such time thereafter as the Chhota Udaipur Durbar may exercise the option reserved to them to purchase the half share of the Baroda Durbar.

7. GAEKWAR'S BARODA STATE RAILWAYS SYSTEM—*concld.*

Bodeli-Chhota Udaipur railway (2′ 6″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.		Gross earnings.	Net earnings.		Percentage of net earnings on total capital outlay given in column (3).		Earnings per mile per week.	Proportion of expenses to earnings.
		Contributed by the Baroda Durbar.	Contributed by the Chhota Udaipur Durbar.		Attributable to the Baroda Durbar.	Attributable to the Chhota Udaipur Durbar.	On capital contributed by the Baroda Durbar.	On capital contributed by the Chhota Udaipur Durbar.		
1	2	3	4	5	6	7	8	9	10	11
	Miles	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.	
1917-18	22·56	5,05,630	5,05,630	18,856	6,576	1,832	1·30	0·36	48	55·41
1918-19	22·56	4,99,026	4,99,026	59,508	19,936	10,788	3·99	2·16	51	48·37
1919-20	22·56	5,09,598	5,09,598	68,357	20,222	806	3·97	0·16	58	69·24
1920-21	22·56	5,12,714	5,12,714	77,294	20,453	1,281	3·99	0·25	66	71·98
1921-22	22·56	5,13,913	5,13,913	79,110	8 221		0·80		67	89·61
1922-23	22·67	5,13,717	5,13,717	88,166	20,551	12,090	4·00	0·24	75	62·98
1923-24	22·31	5,14,013	5,14,013	1,14,527	20,572	9,833	4·00	1·91	97	73·45
1924-25	22·67	5,16,572	5,16,572	1,09,806	20,600	11,300	4·00	2·18	93	70·95
1925-26	22·67	5,16,567	5,16,567	1,28,644	21,206	21,161	4·10	4·10	109	67·07
1926-27	22·67	5,16,567	5,16,567	93,176	20,662	—4,212	4·00	—0·81	79	82·35
					16,450		1·59			
1927-28	22·67	5,16,567	5,16,567	1,09,618	20,663	—8,180	4·00	—1·58	93	88·61
					12,483					
1928-29	22·67	5,18,022	5,18,022	1,12,232	20,709	—7,097	3·99	—1·37	95	87 87
					13,612					
1929-30	22·67	5,20,743	5,20,743	99,462	20,803	7,571	3·99	1·45	84	71·47
					28,374					
1930-31	22·67	5,26,744	5,26,744	98,343	20,855	2,176	3·96	0·41	83	76·58
					23,031					
1931-32	22·67	5,27,901	5,27,901	1,10,565	21,081	11,181	3·99	2·12	94	70·82
		10,55,802			32,262					
1932-33	22·67	5,27,898	5,27,898	1,11,316	21,114	19,491	4·00	3·69	94	63·52
		10,55,796			40,605					
1933-34	22·67	5,28,176	5,28,177	1,22,872	22,802	22,802	4·31	4·31	104	62·88
		10,56,353			45,604					
1934-35	22·67	5,28,201	5,28,200	1,23,003	21,128	11,162	4·00	2·11	104	73·75
		10,56,401			32,290					
1935-36	22·67	5,28,210	5,28,209	1,18,182	21,128	12,638	4·00	2·39	100	71·43
		10,56,419			33,766					
1936-37	22·67	5,28,210	5,28,209	1,23,733	21,128	18,658	3·99	3·53	105	67·84
		10,56,419			39,786					
1937-38	22·67	5,28,210	5,28,209	1,29,049	21,289	21,288	4·03	4·03	109	67·00
		10,56,419			42,577					
1938-39	22·67	5,27,049	5,27,049	1,27,049	21,769	21,768	4·13	4·13	108	65·73
		10,54,098			43,537					

8. GONDAL RAILWAY SYSTEM.

Lines comprised in the system.—The Gondal railway system is made up of :—

	Miles.
(*a*) Gondal railway (3′ 3⅜″ gauge)	118·74
(*b*) Jetalsar-Rajkot railway (3′ 3⅜″ gauge)	46·16
(*c*) Porbandar State Railway (3′ 3⅜″ gauge)	41·25
Total	206·15

(*a*) Gondal railway (3′ 3⅜″ gauge)—

This line which was constructed by Government agency for the Gondal State (after which it is named) was worked up to the 31st March 1911 by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar railway system. The Coalition ceased to exist on the 1st April 1911, from which date up to the 31st March 1919, the lines owned by the Gondal and Porbandar States were worked together as one concern, styled the Gondal-Porbandar State railway. The partnership of the two States in that railway was dissolved and the Porbandar State railway was worked by the Gondal railway for 5 years, from 1st April 1919 to 31st March 1924, after which the working of the former was taken over by the Porbandar State. Working of Porbandar State Railway is handed over to Gondal Railway from 1st September 1936 as per agreement between two Darbars.

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5
Main line—				
Dhasa to Dhoraji	19-1-81	73·69		
Dhoraji to Jam Jodhpur	1-10-89	32·55		
Kunkavav-Bagasra	24-10-36	12·50		
Total open mileage	..	.	118·74	118·74

Details of construction—

Permanent-way.—The permanent-way consists of 41½-lbs. flat-footed steel rails on deodar, jodka teak and steel trough sleepers, except for a length of 65 miles which is relaid with 50-lbs. flat-footed Revised B. S. S. Rails on deodar sleepers.

Ballast.—The line is ballasted with broken stone.

Fencing.—The line is practically unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 200 except for a short portion between Dhoraji and Supedi and east of Paneli Moti Yard and near road under-bridge between Dhoraji and Supedi and at road over-bridge between Supedi and Upleta where it is 1 in 150 and except in approaches to dips where it is 1 in 40.

Agreement—

Nil.—The line is owned and worked by the Gondal State.

Statistics of working (Those for the periods prior to 1913-14 will be found in Appendix 1 to the Railway Administration Report for 1913-14.)—

Year. 1	Mileage open at end of each year. 2	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.* 3	Gross earnings. 4	Net earnings. 5	Percentage of net earnings on total capital outlay given in column (3). 6	Earnings per mile per week. 7	Proportion of expenses to earnings. 8
	Miles.	Rs. [Including the Porbandar State Railway up to 1918-19.]	Rs.	Rs.		Rs.	
1913-14	148·01	71,22,318	9,85,264	5,15,819	6·86	128	47·65
1914-15	148·01	72,52,416	9,65,145	4,40,435	5·73	125	54·37
1915-16	148·01	73,77,802	10,18,762	3,32,081	6·84	134	47·77
1916-17	148·01	74,77,144	10,41,038	4,80,728	6·08	135	53·82
1917-18	148·01	76,47,747	11,96,312	5,77,924	7·13	155	51·69
1918-19	148·01	79,29,884	15,88,137	7,48,872	8·94	206	52·84
1919-20	106·24	64,46,617	12,19,662	6,16,800	9·57	221	49·43
1920-21	106·24	70,99,640	11,96,697	3,99,183	5·62	217	66·64
1921-22	106·24	69,66,821	12,00,495	4,88,322	7·01	217	59·32
1922-23	106·24	70,27,170	13,41,274	5,33,727	7·60	243	60·30
1923-24	106·24	73,85,636	13,47,539	2,72,429	3·69	244	79·78
1924-25	106·24	72,33,604	13,41,619	2,70,959	3·75	243	79·80
1925-26	106·24	76,25,672	13,82,947	3,92,010	5·14	250	71·65
1926-27	106·24	77,33,315	13,50,237	4,57,368	5·91	244	66·13
1927-28	106·24	79,73,843	14,82,796	6,91,840	8·68	268	53·34
1928-29	106·24	82,96,269	16,85,065	9,54,492	11·51	305	43·36
1929-30	106·24	88,48,275	15,69,478	8,44,523	9·54	284	46·20
1930-31	106·24	97,55,140	14,83,642	5,54,468	5·68	269	62·63
1931-32	106·24	1,04,20,602	14,69,210	4,48,161	4·30	266	69·50
1932-33	106·24	1,05,87,742	14,73,687	7,48,914	7·07	267	49·18
1933-34	106·24	1,08,16,297	14,64,026	7,93,844	7·34	265	45·78
1934-35	106·24	1,08,15,691	14,83,553	8,05,405	7·45	269	45·71
1935-36	106·24	1,12,39,379	12,82,396	5,54,938	4·94	232	56·73
1936-37	118·74	1,14,85,345	14,18,938	8,16,930	7·11	230	42·42
1937-38	118·74	1,08,99,429	15,31,343	10,64,868	9·77	248	30·46
1931-39	118·74	1,12,40,310	13,62,540	4,81,160	4·28	221	64·69

* Excluding outlay on the lines Porbandar to Porbandar Bandar and Ranawao to Quarry

(*b*) Jetalsar-Rajkot railway (3′ 3⅜″ gauge)—

This line was constructed and was, up to the 31st March 1911, worked by the Administrative Coalition referred to under the Gondal railway. From the 1st April 1911 to the 31st March 1919 it was worked by the Gondal-Porbandar State railway, after which period the working was taken over by the Gondal railway,

8. GONDAL RAILWAY SYSTEM—*contd.*

(*b*) Jetalsar-Rajkot railway (3′ 3⅜″ gauge)—*concld.*

Progress in opening—

Section of railway. 1	Date of opening. 2	Miles. 3	Total 4
Jetalsar to Rajkot Junction	12-4-93	46·16	46·16

Details of construction—

Permanent-way.—The permanent-way consists of 50-lb. flat-footed steel rails on deodar and jodka teak sleepers.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced except between Rajkot Town and Rajkot Junction.

Curves.—The sharpest curve is of 700 feet radius.

Gradients.—The ruling gradient is 1 in 175 except for a short portion south of Rajkot Town Station where it is 1 in 100 and except in the north approaches of Rhadar bridge where the gradient is 1 in 67.

Agreement—

Memorandum of conditions for separate working, from 1st April 1911, of the Kathiawar railways sanctioned in the Government of India, Foreign Department, letter No. 431-I.B., dated the 23rd February 1911, to the address of the Secretary to the Government of Bombay, Political Department.

Terms and conditions, dated the 14th December 1913, prescribed by the Railway Board, as to the maintenance, management and working of the Jetalsar-Rajkot railway.

Main provisions of Agreement—

(i) *Land.*—Provided, at the cost of the capital, by the Indian States through whose territories the line passes.

(ii) *Government aid.*—Nil. The line is the property of the States of Junagad, Gondal and Rajkot and the Talukdar of Jetpur, who supply funds for any necessary additions thereto chargeable to the capital account. It is maintained and worked by the agency of the Gondal railway, which provides the rolling stock and other appliances, etc., necessary thereunto.

(iii) *Terms of working.*— } 40* per cent. of gross earnings (subject to a biennial revi-
(iv) *Distribution of profits.*— } *35 per cent. in those half-years in which the gross earnings per mile per week exceed Rs. 50. sion) are retained by the working agency, *plus* actual expenditure on maintenance of way, works and stations, police charges and 5 per cent. of gross earnings for hire of rolling stock supplied by the working agency.

(v) *Rates and fares.*—

(vi) *Special obligations as to the conveyance of—*
(*a*) Troops, police, high Government officials and stores.— } The same as those in force on
(*b*) Bullion and coin.— } the Gondal railway.

(vii) *Power of the Government to determine agreement.*—The Railway Board shall exercise the powers of an arbitrator.

(viii) *Power of the Proprietors to determine agreement.*—Nil.

(ix) *Term of agreement.*—None specified.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year. 1	Mileage open at end of each year. 2	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction. 3	Gross earnings. 4	Net earnings 5	Percentage of net earnings on total capital outlay given in column (3). 6	Earnings per mile per week. 7	Proportion of expenses to earnings. 8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14 . . .	46·21	16,20,100	4,07,551	2,18,847	13·51	170	46·30
1914-15 . . .	46·21	16,26,937	4,09,160	2,11,178	12·98	170	48·39
1915-16 . . .	46·21	16,33,978	4,40,225	2,31,636	14·18	183	47·38
1916-17 . . .	46·21	16,33,978	4,79,142	2,30,053	14·08	199	51·99
1917-18 . . .	46·21	16,53,255	5,19,197	2,70,782	16·38	216	47·85
1918-19 . . .	46.21	16,53,255	7,03,549	3,48,166	21·06	293	50·51
1919-20 . . .	46·21	17,02,932	7,07,327	3,81,187	22·38	294	46·11
1920-21 . . .	46·21	17,09,087	7,19,009	1,20,513	7·05	299	83·24
1921-22 . . .	46·21	17,90,926	6,94,546	1,58,198	8·83	289	77·3
1922-23 . . .	46·21	18,90,763	7,79,142	1,10,479	5·84	324	85·82
1923-24 . . .	46·21	20,04,167	8,08,771	4,63,439	23·12	337	42·62
1924-25 . . .	46·21	20,08,873	8,48,911	4,26,345	21·22	353	49·78
1925-26 . . .	46·21	21,02,572	8,20,718	3,99,678	19·01	342	51·30
1926-27 . . .	46·21	22,04,115	7,75,655	4,23,269	19·20	323	45·43
1927-28 . . .	46·21	22,09,475	8,49,040	5,32,271	24·09	353	37·31
1928-29 . . .	46·21	22,12,270	9,58,491	5,05,920	22·87	399	47·22
1929-30 . . .	46·21	23,04,319	9,01,015	4,72,421	20·50	375	47·57
1930-31 . . .	46·21	24,64,672	8,68,440	3,93,263	15·96	361	54·72
1931-32 . . .	46·21	26,85,662	8,92,640	3,86,792	14·40	371	56·67
1932-33 . . .	46·21	26,85,662	9,68,691	5,05,319	18·82	403	47·83
1933-34 . . .	46·21	28,52,671	9,71,883	4,07,448	14·28	404	58·08
1934-35 . . .	46·16	28,52,671	9,28,663	4,92,150	17·25	387	47·00
1935-36 . . .	46·16	28,52,671	9,19,884	4,93,924	17·31	383	46·31
1936-37 . . .	46·16	29,00,671	8,71,294	4,66,869	16·10	363	46·42
1937-38 . . .	46.16	29,36,671	9,67,225	5,01,762	17·09	403	48·13
1938-39 . . .	46.16	29,36,671	9,36,246	5,00,667	17·05	390	46·53

8. GONDAL RAILWAY SYSTEM—*concld.*

(c) Porbandar State Railway (3′ 3⅜″ gauge).

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.	Remarks.
1	2	3	4	5	6
Main line—					
Jam Jodhpur to Porbandar . . .	1-10-89	36·04			* Worked for goods traffic only.
Porbandar to Porbandar Bandar . .	15-3-90	*1·51			
			37·55		
Quarry branch—					
Ranawao to Quarry	17-12-89	*3·70	3·70		
TOTAL .	..	..	..	41·25	

Details of construction—

Permanent-way.—The permanent-way consists of 41¼-lbs. and 50-lbs. flat-footed steel rails on sal, jodka teak and steel trough sleepers deodar.

Ballast.—The line is ballasted with broken stone.

Fencing.—The line is practically unfenced.

Curves.—The sharpest curve is of 528 feet radius.

Gradients.—The ruling gradient is 1 in 150, except on Ranawao Quarry line where it is 1 in 67 and in dip approaches where it is 1 in 50.

Agreement—

The line is owned by the Porbandar State and worked by the Gondal Railway as per agreement between two Darbars.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1919-20 . .	41·29	16,77,108	3,80,078	2.22 676	13·28	177	41·41
1920-21 . .	41·29	16,77,108	3,86,928	2,20,802	13·17	180	42 93
1921-22 . .	41·29	16,48,436	4,20,919	2,54.112	15·42	196	39 63
1922-23 . .	41·29	17,57,885	4,42,507	2,62,586	14·94	206	40·66
1923-24 . .	41·29	18,38,538	3,66,495	1,77,114	9·63	171	51·67
1924-25 . .	41·29	23,26,159	3,65,431	83,091	3·57	171	77·26
1925-26 . .	41·29	23,76,343	4,09,175	79,516	3·34	190	80·57
1926-27 . .	41·29	24,00,388	3,98,413	82,238	3·43	185	79·36
1927-28 . .	41·29	24,94,973	4,44,196	1,73,176	6·94	207	61·01
1928-29 . .	41·29	26,06,930	4,51,852	1,43.154	5·49	210	68·32
1929-30 . .	41·29	28,03,687	4,10,908	94,109	3·36	191	77·10
1930-31 . .	41·29	28,18,228	3,83,751	11,507	0·41	179	97·00
1931-32 . .	41·29	28,24,635	3,42,166	62,631	2·22	159	81·70
1932-33 . .	41·29	28,27,134	3,36,091	1,30,314	4·61	156	61·22
1933-34 . .	41·29	28,15,979	3,10,645	1,29,427	4·60	145	58·34
1934-35 . .	41·29	28,67,111	3.32,003	1,40,306	4·90	155	57·74
1935-36 . .	41·29	28,30,138	3,49,884	1,54,190	5·45	163	55·93
1936-37 . .	41·25	23,17,476	3,41,518	99,175	4·28	159	70·96
1937-38 . .	41.25	25,62,273	3,89,990	1,27,251	4·97	182	67.37
1938-39 . .	41·25	26,64,118	3,56,733	98,338	3·69	166	72·43

9. JAIPUR STATE RAILWAY.

Jaipur State railway (3′ 3⅜″ gauge).

Running Powers— Total miles.

Home Line over foreign lines—

Jaipur-Sanganer Section, Bombay Baroda and Central India Railway . . . . . 6·50

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	To al. 4	Grand total. 5
Main line—				
Sanganer to Nawai	10-11-05	32·15		
Nawai to Sawai-Mádhopur	17-10-07	41·19	73·34	
Jhunjhunu section—				
Jaipur to Reengus	19-12-16	35·50		
Reengus to Palsana	6-4-18	14·14		
Palsana to Sikar	1-12-22	17·02		
Sikar to Nawalgarh	18-9-23	16·95		
Nawalgarh to Jhunjhunu	1-8-24	22·85	106·46	
Total open mileage	..		179·80	
Lines under construction or sanctioned for construction—				
Jhunjhunu to Loharu	..	35·82		
Sikar to Bissau	..	47·88	83·70	
				263·50
GRAND TOTAL				

Details of construction—

Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails laid on sal and deodar sleepers.

Ballast.—The line is ballasted with stone ballast.

Fencing.—The line is unfenced except at stations and at points where the line crosses the main roads.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—On Sanganer-Sawai Madhopur Section the ruling gradient is 1 in 250, except for 4 miles and 1,080 feet at the beginning of the line where it is 1 in 200. On Jaipur-Jhunjunu section the ruling gradient is 1 in 200, except on Reengus-Sikar portion where it is 1 in 150.

Agreement—

The line was built and is owned by the Jaipur Darbar. It was worked by the Bombay Baroda and Central India Railway Company, prior to 1st April 1936, but the Durbar has taken over the working from this date.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year. 1	Mileage open at end of each year. 2	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open, and (ii) lines partly or wholly under construction. 3	Gross earnings. 4	Net earnings. 5	Percentage of net earnings on total capital outlay given in column (3). 6	Earnings per mile per week. 7	Proportion of expenses to earnings. 8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	72·84	24,74,723	3,12,429	1,57,262	6·35	82	49·66
1914-15	72·84	31,40,371	2,94,080	1,40,235	3·85	78	52·31
1915-16	72·84	45,76,524	3,94,842	2,09,788	4·58	104	46·87
1916-17	107·22	51,70,743	4,46,928	2,54,947	4·93	104	42·96
1917-18	108·04	54,07,542	3,82,033	2,13,839	3·95	68	44·03
1918-19	122·21	56,08,493	4,64,863	2,59,828	4·63	73	44·11
1919-20	122·21	57,03,635	5,03,095	2,24,945	3·94	79	55·29
1920-21	122·21	59,73,142	5,70,858	1,86,277	3·12	90	67·37
1921-22	122·21	63,25,789	6,64,047	1,59,772	2·53	104	75·94
1922-23	139·23	68,69,867	7,96,496	2,42,854	3·54	110	69·51
1923-24	156·18	73,45,929	7,49,292	3,04,386	4·14	103	59·38
1924-25	179·10	76,64,086	9,83,499	4,18,972	5·47	106	57·42
1925-26	179·10	76,83,831	10,44,838	4,04,666	5·27	112	61·27
1926-27	181·11	76,85,831	10,37,665	3,86,010	5·02	110	62·80
1927-28	181·11	76,95,647	11,19,623	4,26,231	5·54	119	61·93
1928-29	181·11	77,06,749	11,52,747	4,88,319	6·34	122	57·64
1929-30	181·11	77,30,338	12,44,872	4,83,204	6·25	132	61·18
1930-31	181·11	77,33,441	12,11,623	4,20,332	5·43	129	65·31
1931-32	181·11	77,34,661	10,96,665	4,37,544	5·66	116	60·10
1932-33	181·11	76,62,319	11,84,321	5,04,771	6·59	126	57·38
1933-34	181·11	76,62,319	11,14,229	5,02,122	6·55	118	54·94
1934-35	181·11	76,62,319	11,26,970	4,74,680	6·19	120	57·88
1935-36	179·80(a)	76,62,319	11,85,191	5,28,721	6·90	127	55·39
1936-37	179·80	88,23,798	12,39,785	5,97,286	6·77	132	51·82
1937-38	179·80	92,80,594	13,31,477	5,34,479	5·76	142	59·86
1938-39	179·80	96,71,044	15,47,239	7,26,144	7·51	165	53·07

(a) The change is due to remeasurement of track made by the B. B. & C. I. Railway in 1934-35 as advised by the Engineer-in-Chief, Ajmer, in his letter No. E/5-14, dated the 5th January 1937, to the Agent, Jaipur State Railway.

10. JAMNAGAR DWARKA RAILWAY SYSTEM (3′ 3⅜″ gauge).

Lines comprised in the system

The Jamnagar Dwarka railway system is made up of—

	Open line.	Under construction or sanctioned for construction.	Total.
	Miles.	Miles.	Miles.
(*a*) Jamnagar railway (3′ 3⅜″ gauge)	59·96	27·02	86·98
(*b*) Jamnagar Dwarka railway 3(3′ 3⅜″ gauge)	§§73·68	1·05	74·73
(*c*) Okhamandal railway (3 ′ 3⅜″ gauge)	37·21	..	37·21
TOTAL.	170·85	28·07	198·92

Agreement—

The three railways comprised in the system are worked from 4th April 1923 under one management under the terms of an agreement between the Nawanagar and Baroda Darbars and the Jamnagar Dwarka Railway Company. The Jamnagar Dwarka Railway Co. which was owned by the Agents J. D. Railway Co., Ltd., Bombay, was purchased by the Nawanagar State from 1st October 1936 and the whole system is now being worked as Jamnagar Dwarka Railway comprising :—

Jamnagar Railway . . . } Owned by the Nawanagar State.
Jamnagar Dwarka Railway . . }

Okhamandal Railway . . . Owned by the Baroda State under an agreement with the Baroda State.

Main provisions of agreement—

(i) *Land.*—Provided by the Nawanagar and Baroda Darbars free of cost.

(ii) *Aid by the Durbars and the Company.*—All funds required for the construction of the Jamnagar and Okhamandal railways were provided by the Nawanagar and Baroda Darbars and those for the Jamnagar Dwarka Railway by the Company. The Jamnagar Dwarka Railway has been purchased from the Jamnagar Dwarka Railway Co. from 1st October 1936 by the Nawanagar State.

(iii) *Terms of working.*—Gross earnings are credited to the railway concerned and working expenses divided on the basis of actuals wherever possible and on train mileage, vehicle mileage or other agreed upon basis in other cases.

(iv) *Distribution of profits.*—The gross earnings, after deduction of working expenses, are credited to the proprietors of the two railways.

(v) *Rates and fares.*—The rates and fares are charged within the maxima and minima authorised from time to time by the Railway Board.

(vi) *Special obligations as to the conveyance of—*

(*a*) *Mails, troops, police, high Government officials and Government stores.*—To be conveyed at the rates and on conditions generally in force on State railways.

(*b*) *Government bullion and coin and persons in charge thereof.*—At rates sanctioned by the Railway Board.

(vii) *Power to determine agreement.—* } One year's notice.
(viii) *Power of the coalition to surrender agreement.—* }

(ix) *Term of agreement* [*if not determined under* (vii) *and* (viii)].—Nil.

(*a*) Jamnagar Railway (3′ 3⅜″ gauge)—

The Jamnagar Railway was constructed for the Nawanagar State and was, up to the 31st March 1911, worked by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working as one undertaking the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar Railway. The Coalition ceased to exist on the 1st April 1911, from which date and up to the 3rd April 1923, the line was worked independently as a separate concern. With effect from the 4th April 1923, the line became part of the Jamnagar and Dwarka Railway combined system. The line is owned by the Nawanagar State.

§§The difference of 1·05 between the figures of mileage opened at end of 1938-39 as shown in the History (73·68) and that shown in Statement 8 of Volume II for 1938-39 (74·73) is due to the fact that this mileage was actually under construction at the close of the year and was opened only on the 10th June 1939, *i.e.*, in 1939-40. The Railway while giving the figures for volume II appears to have erroneously treated it as opened in 1938-39.

10. JAMNAGAR DWARKA RAILWAY SYSTEM —*contd.*

(*a*) Jamnagar Railway (3′ 3⅜″ gauge)—*concld.*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Rajkot Junction to Jamnagar	8-4-97	50·29		* Worked for goods traffic.
Jamnagar to Bedi Bandar	8-4-97	*3·93		
Rozi Block Hut to Rozi Pier (Bedeshwar)	26-5-38	§5·74		§Opened for coaching traffic from 26th May 1938.
TOTAL OPEN MILEAGE	..	59.96		
Lines under construction—				
Hadmatia-Dhrol Jodiya Extension	..	27·02		
			86·98	

Details of construction—

Permanent-way.—The permanent-way consists of 50-lb. flat-footed steel rails on half-round jodka teak sleepers. The permanent way on Bedeshwar Rozi Section consists of 41¼lbs. serviceable second hand flat-footed steel rails on half-round Jodka Teak sleepers.

Ballast.—The ballast used is of broken stone.

Fencing.—The line is unfenced, except at the approaches to the Victoria bridge near Jamnagar and to the south of the Jamnagar station yard.

Curves.—The sharpest curve is of 1,000 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Agreement —

As above.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 33 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	54·22	23,53,951	2,91,782	1,55,756	6·62	103	46·62
1914-15	54·22	23,70,800	3,01,245	1,09,605	4·62	107	63·62
1915-16	54·22	23,96,173	3,23,354	1,45,755	6·08	115	54·92
1916-17	54·22	24,08,946	3,43,360	1,46,315	6·07	122	57·39
1917-18	54·22	24,25,901	3,74,024	1,76,505	7·28	133	52·81
1918-19	54·22	24,75,036	4,94,448	2,73,205	11·04	175	44·75
1919-20	54·22	25,83,031	5,15,237	2,77,692	10·75	183	46·10
1920-21	54·22	27,68,321	4,56,631	2,08,453	7·53	162	54·35
1921-22	54·22	28,51,994	5,18,095	2,27,363	7·97	184	56·12
1922-23	54·22	29,94,796	5,54,087	2,03,520	6·80	196	63·27
1923-24	54·22	30,13,369	6,45,923	2,76,172	9·16	229	57·24
1924-25	54·22	31,12,576	6,22,181	2,15,405	6·92	221	65·38
1925-26	54·22	32,31.113	6,97,920	2,93,085	9·07	247	58·01
1926-27	54·22	33,10,560	6,93,165	2,84,646	8·60	246	58·94
1927-28	54·22	47,21,038	9,85,752	4,35,308	9·22	350	55·84
1928-29	54·22	48,95,316	10,39,832	4,26,401	8·71	369	58·99
1929-30	54·22	50,24,987	9,02,177	3,02,582	6·02	320	66·46
1930-31	54·22	51,16,457	8,89,256	2,94,423	5·75	315	66·89
1931-32	54·22	50,25,402	8,18,147	1,21,085	2·41	290	85·20
1932-33	54·22	49,81,242	7,69,056	1,98,811	3·99	273	74·15
1933-34	54·22	49,85.584	7,76,515	2,85,490	5·73	275	63·23
1934-35	54·22	49,95.195	8,25,798	3,88,640	7·78	292	52·24
1935-36	54·22	49,92,280	8,05,592	3,89,114	7·79	286	51·70
1936-37	54·22	50,38,261	7,03,518	3,06,293	6·09	250	56·46
1937-38	54·22	50,51,049	8,06,331	4,55,129	9·01	286	43·56
1938-39	59·96	51,97,789	7,41,304	3,73,385	7·18	238	49·63

10. JAMNAGAR DWARKA RAILWAY SYSTEM—*contd.*

(*b*) Jamnagar Dwarka Railway (3' 3⅜" gauge)—

This line was constructed by the Jamnagar Dwarka Railway Company and worked by the Jamnagar Railway from the 1st April 1922 to the 3rd April 1923. With effect from the 4th April 1923 it became part of the above system. The line was owned by the Jamnagar Dwarka Railway Company Ltd. from 1st April 1922 to 30th September 1936 and the Nawanagar Darbar has purchased it from Jamnagar Dwarka Railway Campany Ltd. from 1st October 1936. The line is now owned by the Nawanagar State.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total	Remarks.
1	2	3	4	5
Jamnagar to Khambhalia	1-4-22	33·56		Line opened for Coaching and Goods Traffic from 19th January 1939. Line opened for Goods traffic from 10th June 1939.
Khambhalia to Kuranga	1-9-22	32·36		
Khambhalia to Salaya	19-1-39	7·76		
TOTAL OPEN MILEAGE		73·68		
Lines under construction :—				
Salaya Station to Salaya Bandar	...	1·05		
GRAND TOTAL	...	...	74·73	

Details of construction—

Permanent-way.—The line between Jamnagar and Khambhalia and the first 4½ miles between Khambhalia and Kuranga are laid with 50-lb. flat-footed steel rails, British Standard Section, and the rest with 41¼-lb. rails. The line between Khambhalia and Salaya Bandar is laid in the first three miles with 41¼-lbs. second hand serviceable steel flat footed rails British section taken out from Rajkot Jamnagar section. The remaining 6 miles consist of new 50 lbs. Rails British Standard Section flat footed. The sleepers are half-round jungle and jodka teak, except at joints and turnouts where square sleepers are used.

Ballast.—This consists of hard moorum.

Fencing.—The line is unfenced except at stations and within the town limits of Jamnagar.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 150

Agreement—

As above.

Statistics of working—

Year	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1922-23	65·92	58,99,744	52,808	43,005	0·73	19	17·81
1923-24	65·92	63,92,760	2,93,944	91,010	1·42	86	69·04
1924-25	65·92	65,85,339	2,56,438	46,067	0·70	75	82·04
1925-26	65·92	66,32,593	3,05,072	1,00,559	1·52	89	67·04
1926-27	65·92	67,60,633	2,94,195	1,05,496	1·56	86	64·14
1927-28	65·92	67,76,663	3,84,849	1,65,057	2·44	112	57·11
1928-29	65·92	67,86,770	4,16,132	1,55,271	2·29	121	62·69
1929-30	65·92	67,94,564	3,75,438	93,289	1·38	109	75·15
1930-31	65·92	68,20,311	3,52,417	1,18,339	1·73	103	66·42
1931-32	65·92	68,33,593	3,32,847	71,599	1·05	99	78·49
1932-33	65·92	68,39,849	3,27,998	69,983	1·02	96	78·66
1933-34	65·92	68,39,819	3,19,176	1,07,310	1·57	93	66·38
1934-35	65·92	68,26,945	3,44,332	1,53,130	2·24	100	55·53
1935-36	65·92	68,36,827	3,21,820	1,33,498	1·95	94	58·52
1936-37	65·92	68,31,225	2,97,277	92,500	1·35	87	68·88
1937-38	65·92	68,22,292	3,35,972	1,23,382	1·81	91	63·28
1938-39	73·68	70,27,506	3,03,341	65,512	0·93	79	78·40

10. JAMNAGAR DWARKA RAILWAY SYSTEM—*concld.*

(*c*) Okhamandal Railway (3′ 3⅜″ gauge)—

The line is the property of His Highness the Maharaja Gaekwar of Baroda. It was constructed and worked by the Gaekwar's Baroda State Railways up to the 3rd April 1923. With effect from the 4th April 1923, this line and the Jamnagar Dwarka Railway have been amalgamated with the Jamnagar Railway and is known as the Jamnagar Dwarka Railway.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Kuranga to Okha	15-11-22	37·21	37·21

Details of construction—

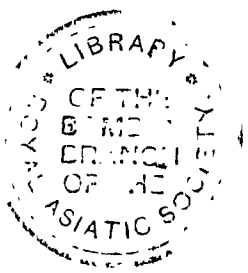
Permanent-way.—The permanent-way consists of 41½-lb. flat-footed steel rails laid on wooden sleepers some square and some half-round. The whole section is to be renewed with 60 and 50 lb. rails on a programme basis at 4 miles a year. Up to 31st March 1930, 8 miles have been so renewed, 4 miles have been renewed with second hand serviceable rails of 70 lbs. in 1932-33. 4 miles have been renewed with 50 lbs. new rails in 1937-38. In all 16 miles have been renewed up to 31st March 1939.

Ballast.—The line is ballasted with stone.

Fencing.—Nil.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 150.



Agreement—

As above.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1922-23 .	37·03	26,75,359	58,590	—71,923	..	30	222 76
1923-24 .	37·03	32,62,508	1,96,518	39,707	1·22	102	79·79
1924 25 .	37·03	32,96,967	1,38,457	20,580	0·63	72	85·14
1925 26 .	37·03	35,50,833	1,25,566	11,740	0·33	65	90·65
1926 27 .	37·21	36,00,230	1,18,803	12,366	0·34	61	89·59
1927 28 .	37·21	35,74,904	1,58,348	32,889	0·92	82	79·23
1928-29 .	37·21	39,57,816	2,36,095	6,375	0·16	122	97·30
1929-30 .	37·21	43,35,128	2,39,448	—57,780	—1·33	123	124·13
1930-31 .	37·21	42,33,304	2,02,383	—44,634	—1·05	105	122·05
1931-32 .	37·21	42,38,731	2,37,150	28,719	0·68	122	87·89
1932-33 .	37·21	42,94,334	2,93,308	1,18,780	2·76	152	59·50
1933-34 .	37·21	41,04,729	3,04,808	1,19,023	2·90	157	60·95
1934-35 .	37·21	41,05,124	3,20,784	94,562	2·30	166	70·52
1935-36 .	37·21	40,76,407	3,50,385	1,65,858	4·07	181	52·66
1936-37 .	37·21	40,73,549	3,14,665	1,53,051	3·76	163	51·36
1937-38 .	37·21	40,68,886	3,49,482	1,30,944	3·22	181	62·53
1938-39 .	37·21	42,50,832	3,41,597	1,41,662	3·33	177	58·53

11. JUNAGAD STATE RAILWAY (3′ 3⅜″ gauge).

The main line up to Veraval Docks was constructed by Government agency for the Indian State of Junagad (after which it is named). Up to the 31st March 1911, it was worked by an Administrative Coalition of the States of Bhavnagar, Gondal, Junagad and Porbandar, which was formed for the purpose of working, as one undertaking, the railways which, prior to that date, were comprised in the Bhavnagar-Gondal-Junagad-Porbandar Railway. The Coalition Ceased to exist on the 1st April 1911, on and from which date the line is being worked independently as a separate and distinct railway. Since working independently branches have been extended to Saradiya, Visavadar, Dhari and Delvada.

Progress in opening—

Sections of railway 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5
Main line—				
Jetalsar to Junagad	1-9-88	16·00		
Junagad to Veraval Docks	1-2-89	51·53	67·53	
Saradiya branch—				
Shapur to Manavadar	15-2-10	15·86		
Manavadar to Bantwa	25-12-10	3·45		
Bantwa to Saradiya	15-5-15	7·00		
Visavadar branch—			26·31	
Junagad to Bilkha	20 5-12	13·64		
Bilkha to Visavadar	5-2-13	12·92		
Una Branch—			26·56	
Veraval to Talala	2-4-18	15·38		
Talala to Jambur	17-3-20	4·86		
Jambur to Prachi Road	13-11-23	7·64		
Prachi Road to Jamwala	18-4-34	7·05		
Jamwala to Delvada	10-1-35	24·22		
Dhari Branch—			59·15	
Visavadar to Dhari	15-12-32	19·49		
Talala Visavadar Branch—			19·49	
Talala to Sasangir	17-3-36	10·83	29·45	
Sasangir to Visavadar	1937-38	18·62		
Dungarpur quarry line	10-12-12	0·73	0·73	
Total open mileage	..	..	..	229·22

Details of construction—

Permanent-way.—The permanent-way consists of 50-lb. flat-footed rails for the main line (except station yards) and 41¼ lb. flat-footed steel rails for the branches, on jodka teak sleepers with a very small proportion of other timbers.

Ballast.—The main line is ballasted with stone, the branches with moorum on banks and stone in cuttings.

Fencing.—The line is unfenced except for short portions in the immediate vicinity of Junagad town.

Curves.—The sharpest curve is of 1,200 feet radius.

Gradients.—The ruling gradient is 1 in 150 with the exception of short lengths of 1/100 on the approaches of the Ozat bridge, main line.

Agreement—

Nil.—The line is owned and worked by the State of Junagad.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 1 to the Railway Administration Report for 1913-14.)—

Year. 1	Mileage open at end of each year. 2	Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction 3	Gross earnings. 4	Net earnings. 5	Percentage of net earnings on total capital outlay given in column (3). 6	Earnings per mile per week. 7	Proportion of expenses to earnings. 8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	113·42	60,44.323	6,18,701	2,97.380	4·92	105	51·93
1914-15	113·90	62,46,354	6,21,293	2.92,418	4·68	105	52·93
1915-16	120·90	64,08,751	6,96,353	3,40,103	5·33	111	51·10
1916-17	120·90	66,60,644	7,49,201	3,68,837	5·54	119	50·77
1917-18	120·90	73,58,833	8,14,346	1,74,236	2·37	130	78·60
1918-19	135·60	77,58.442	9,08,268	5,61,594	7·24	142	43·74
1919-20	135·60	82,29,456	10,54,451	5,35,560	6·51	150	49·21
1920-21	140·46	97,33,733	11,25,490	5,26,637	5·41	154	53·21
1921-22	140·46	1,01,84,179	11,21,646	4,54,587	4·46	154	59·47
1922-23	140·46	1,04,88,108	12,91,867	5,18,824	4·95	177	59·84
1923-24	148·10	1,05,22,022	14,28,768	4,08,601	4·45	186	67·20
1924-25	148·10	1,09,80,958	14,00,185	6,47,934	5·90	182	53·73
1925-26	148·10	1,10,18,742	15.01.864	6.87,272	6·24	195	54·24
1926-27	148·10	1,11,96,481	13,76,338	5,29,513	4·73	179	61·53
1927-28	148·10	1,12,41,464	14,00,446	4,95,024	4·40	182	64·65
1928-29	148 10	1,13,84,036	15,44,257	6.47,674	5·69	201	58·06
1929-30	148·33	1,16,61,430	14,35,095	5,65,333	4·85	186	60·61
1930-31	148·33	1,17,99,771	13,84,972	4,06.510	3·45	180	70·65
1931-32	148·33	1,21,43,411	13,52,247	3,84,954	3·17	175	71 53
1932-33	167·82	1,26,79,727	13,24,706	4,71,639	3·72	165	64·40
1933-34	167·82	1,33,04,641	16,10,409	7,03,282	5·29	185	56·33
1934-35	199·09	1,40,75,685	16,86,970	7,41,425	5·27	180	56·05
1935-36	210·60	1,49,74,588	16,73,328	6,47,740	4·33	161	61·29
1936-37	210·60	1,59,96,349	18,10,110	8,34,214	5·22	165	53·91
1937-38	229·22	1,64,25,766	19,24,513	9,41,893	5·73	168	51.06
1938-39	229·22	1,64,08,362	19,64,682	6,58,551	4·01	165	66.48

12. MORVI RAILWAY (3′ 3⅜″ gauge).

The whole line was originally on the 2′ 6″ gauge. In 1905 the length between Wadhwan and Rajkot was converted to the 3′ 3⅜″ gauge—from Wadhwan to Than Road, 31·34 miles, on a new alignment and onwards to Rajkot, 42·60 miles, on the original alignment with a few unimportant diversions. The line between Wankaner and Morvi was converted in 1924.

2. The Morvi-Navlakhi line, 29·93 miles, which was hitherto worked as a Metre Gauge Tramway of the Morvi State, was opened as a Metre Gauge (3′ 3⅜″) Railway on and from 15th December 1934 and is worked from that date as an integral part of the Morvi Railway. The Morvi-Navlakhi line was commenced in 1891 as a Morvi State Tramway on 2′-6″ gauge and was subsequently converted into Metre Gauge Tramway on and from 29th March 1933. Conversion of the Metre Gauge Tramway into a Railway of the same gauge was sanctioned under Railway Board's Notification No. 1917-W of 8th October 1934.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Main line—				
Wadhwan to Rajkot Junction. . .	*4-3-05	73·94	..	* These are the dates of opening on 3′ 3⅜″ gauge. The dates of opening on 2′ 6″ gauge were:— Wadhwan to Wankaner, 1886. Wankaner to Morvi, 1887. Wankaner to Rajkot, 1890.
Branches—				
Wankaner Junction to Morvi . .	*6-6-24	15·83	..	
Than Junction to Chotila . . .	16-6-26	12·56	..	
Morvi to Navlakhi	15-12-34	29·93	..	
Total .	..	..	132·26	

Details of construction—

Permanent Way.—The permanent way on the main line from Wadhwan Junction to Rajkot Junction consists of 50-lbs. flat-footed British standard steel rails on half-round teak sleepers while that on the branch lines from Wankaner Junction to Morvi and Than Junction to Chotila consists of 41¼-lbs. flat-footed steel rails on half-round teak sleepers. On Morvi-Navlakhi line the permanent way consists of 41¼-lbs. flat-footed steel rails on half-round teak as well as sâl wood sleepers from Mile N/1 to Mile N 19/4. From Mile N 19/4 to Mile N 29/7. 41¼ lbs. Steel flat footed rails of 30′ length on half round teak sleepers have been replaced by 50 lbs. new standard F. B. rails of 36′ length on new half round jodka teak sleepers.

Ballast.—The whole line is ballasted with stone ballast.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 8° or 716·25 feet radius.

Gradients.—The ruling gradient of the whole line is 1 in 150.

Contract—

Nil.—The line was constructed by His Highness the Maharaja Saheb of Morvi, at his own expense, and is maintained and worked by him.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14).—

Year	Mileage open at end of each year.	Total capital outlay, including suspense to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14 . .	92·83	52,11,157	7,76,902	5,03,049	9·65	161	35·25
1914-15 . .	92·83	52,83,719	7,66,981	4,86,346	9·24	159	36·59
1915-16 . .	92·83	53,80,469	7,73,044	4,92,318	9·15	160	36·31
1916-17 . .	92·83	53,60,305	8,68,711	6,23,172	11·63	180	28·26
1917-18 . .	92·83	53,76,628	9,76,455	7,14,137	13·28	202	26 86
1918-19 . .	92·83	53,58,754	14,44,127	10,26,490	19·16	299	28·92
1919-20 . .	92·83	54,15,644	12,89,149	8,04,520	14·86	267	37·59
1920-21 . .	92·83	56,28,763	13,04,368	7,84,161	13·92	270	39·88
1921-22 . .	92·83	56,76,624	12,78,134	7,07,514	12·46	265	44·64
1922-23 . .	92·83	58,71,475	14,74,018	6,65,895	11·34	305	54·82
1923-24 . .	92·83	62,62,951	16,14,195	6,86,676	10·96	334	57·46
1924-25 . .	89·77	65,22,163	15,68,430	5,00,024	7·67	335	68·12
1925-26 . .	89·77	68,52,484	16,27,765	6,71,562	9·80	349	58·74
1926-27 . .	102·33	74,03,843	16,65,015	6,14,835	8·30	321	63·07
1927-28 . .	102·33	76,60,927	18,47,949	8,02,040	10·47	347	56·60
1928-29 . .	102·33	77,82,053	21,42,581	10,26,558	13·19	402	52·09
1929-30 . .	102·33	78,34,955	21,04,884	9,61,562	12·27	396	54·32
1930-31 . .	102·33	80,48,268	20,33,496	8,01,613	9·96	382	60·58
1931-32 . .	102·33	82,14,943	17,78,600	7,55,099	9·19	334	57·54
1932-33 . .	102·33	82,43,935	16,61,849	6,44,431	7·82	312	61·25
1933-34 . .	102·33	82,85,897	16,06,138	5,98,508	7·22	301	62·74
1934-35 . .	132·26	1,06,28,363	17,97,098	8,13,456	7·65	310	54·73
1935-36 . .	132·26	1,09,56,086	18,80,186	8,28,653	7·56	273	55·93
1936-37 . .	132·26	1,11,49,626	18,15,695	7,79,632	6·99	264	57·06
1937-38 . .	132.26	1,12,89,829	19,23,834	9,43,486	8·36	280	50.96
1938-39 . .	132.26	1,13,50,825	18,86,428	8,02,427	7.07	274	57·46

12. MORVI RAILWAY (3 3⅜" gauge)—*contd.*

(*b*) **Morvi Tramway** (2′ 6″ gauge).

The Tramway is under the control of the Morvi Railway.

Progress in Opening—

Sections of Railway.	Date of opening.	Miles.	Date of closing.	Miles.	Date of reopening.	Miles.	Total.	Remarks.
1	2	3	4	5	6	7	8	9
Morvi-Morvi City Dahinsara-Navlakhi	1893-94	33	1933-34	33	..	..	..	Morvi-Navlakhi line was converted as metre guage Tramway on 29th March 1933 and as Metre gauge Railway on 29th November 1934.
Pipalia Road-Malia .	1893-94	12	1903-04	12	..	..	..	
Morvi-Sanala-Tankara .	1894-95	13	1902-03	13	1906-07	13	13	
Dahinsara-Wawania .	1901-02	3	1933-34	3	..	..	..	
Morvi-Jetpur . .	1904-05	16	..	..	..	..	16	
Sanala-Khanpur . .	1925-26	12	..	..	..	..	12	
Khanpur-Amran Road .	1927-28	2	..	..	..	..	2	
Jetpur-Khakhrechi .	1927-28	7	..	..	..	..	7	
Khakhrechi-Ghantila .	1933-34	8	..	..	..	..	8	
Total .	..	..	..	..	..	..	58	

Details of Construction—

Permanent-way.—(1) The permanent way on the Morvi Tankara section consists of 29 lbs. rails on wooden and steel sleepers in the first seven miles and of 19 lbs. rails on steel sleepers in the remaining mileage.

(2) The nature of the track on Sanala-Amran Road is 19 lbs. rails on wooden sleepers.

(3) The track on Morvi-Jetpur-Khakhrechi-Ghantila line consists of 19-lbs. rails on steel sleepers from Morvi to Jetpur and 19 lbs. on wooden sleepers from Jetpur to Ghantila.

Ballast.—All the sections are ballasted with Murram Ballast.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 23 degree.

Gradients.—The ruling gradient on the Sections is 1 in 100.

13. MORVI RAILWAY (3′ 3⅜″ gauge).—*concld.*

(*b*) Morvi Tramway (2′ 6″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Next earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.	Rs.	Rs.	
1893-94	45·00	2,05,765	36,378	8,474	4·12	15	78·80
1894-95	58·00	2,94,760	50,177	19,036	6·46	17	62·06
1895-96	58·00	4,15,438	53,917	11,731	2·75	18	78·24
1896-97	58·00	4,36,081	55,773	12,180	2·79	18	78·34
1897-98	58·00	4,44,327	52,891	11,746	2·64	17	77·79
1898-99	58·00	4,60,352	69,114	30,251	6·50	23	56·13
1899-00	58·00	4,70,092	83,295	7,211	1·10	28	91·34
1900-01	58·00	4,84,829	56,374	16,755	3·25	19	70·38
1901-02	61·00	4,99,309	70,039	32,988	6·60	22	52·90
1902-03	48·00	5,15,885	64,282	31,791	6·16	26	50·39
1903-04	36·00	5,49,141	80,917	45,835	8·34	43	43.35
1904-05	52·00	5,49,319	65,115	28,981	5·27	24	55·49
1905-06	52·00	25,63,626	79,317	39,504	7·00	29	50·19
1906-07	65·00	5,65,834	70,241	23,899	4·22	21	65·98
1907-08	65·00	5,66,434	71,671	15,825	2·79	21	77·92
1908-09	65·00	5,73,914	66,299	21,287	3·71	20	67·89
1909-10	65·00	5,85,177	68,540	26,645	4·55	20	61·12
1910-11	65·00	5,97,158	86,151	39,428	6·59	25	54·23
1911-12	65·00	6,21,997	81,025	32,770	5·26	24	59·56
1912-13	65·00	6,34,166	99,006	40,180	6·33	29	59·42
1913-14	65·00	6,56,578	1,07,605	57,106	8·69	32	46·10
1914-15	65·00	10,62,445	1,04,705	41,977	3·95	31	59·90
1915-16	65·00	10,65,481	1,10,044	52,105	4·88	32	52·65
1916-17	65·00	10,72,375	1,12,502	52,097	4·86	33	53·69
1917-18	65·00	10,72,655	1,56,622	95,220	8·88	46	39·20
1918-19	65·00	10,76,269	1,47,643	85,893	7·98	44	41·82
1919-20	65·00	10,80,733	1,50,416	88,903	8·22	44	40·89
1920-21	65·00	11,06,718	1,21,373	53,267	4·81	36	56·11
1921-22	65·00	11,07,257	1,31,788	61,205	5·53	39	53·55
1922-23	65·00	11,26,944	1,69,542	79,968	7·10	50	52·83
1923-24	65·00	12,19,505	1,41,709	—29,081	—2·38	42	120·52
1924-25	65·00	12,99,303	1,65,660	—10,967	—8·23	49	164·57
1925-26	77·00	14,42,526	1,54,522	43,384	3·00	36	71·92
1926-27	77·00	15,08,498	1,64,671	57,011	3·78	41	65·38
1927-28	86·00	15,89,645	2,27,749	57,565	3·63	51	74·72
1928-29	86·00	17,37,217	2,07,720	55,298	3·19	46	73·38
1929-30	86·00	17,56,363	1,80,229	—448	—0·03	40	100·25
1930-31	86·00	18,15,593	1,78,876	—15,948	—0·88	40	108·91
1931-32	86·00	19,96,000	2,23,989	63,628	3·19	50	71·59
1932-33	86·00	24,96,991	2,23,288	66,400	2·66	50	70, 26
1933-34	94·00	27,16,457	2,52,859	1,38,003	5·08	52	45·42
1934-35	58·00	9,57,181	1,14,600	49,996	3·66	38	56·37†
1935-36	58·00	10,06,805	76,003	—43,815	—4·35	25	157·65
1936-37	‡58·00	‡10,16,300	‡76,633	‡—756	‡—0·07	25	‡100·99
1937-38	58·00	10,29,788	77,463	—8,281	—0·80	24	110·69
1938-39	58·00	10,25,839	75,763	41,629	4·06	25	45·05

†NLK N. G. transferred to M. G.

Note.—The figures upto 1936-37 are for the year ending September instead of financial year.

‡Revised figures.

13. SHAHDARA (DELHI)-SAHARANPUR LIGHT RAILWAY (2′ 6″ gauge).

Managing Agents.—Messrs. Martin & Co., Calcutta.

Date of registration of the Company.—28th November 1905.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Shahdara to Shamli	7-5-07	92·50	
Shamli to Saharanpur	15-10-07		
TOTAL	..	..	92·50

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed steel rails laid on sâl sleepers.

Ballast.—The line is ballasted with stone and broken brick.

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 1,910 feet radius.

Gradients.—The ruling gradient is 1 in 1,000, with some short lengths of 1 in 333.

Local Government order and agreement—

The Shahdara-Saharanpur Tramway Company order, published under the Government of the United Provinces of Agra and Oudh, Public Works Department, Railway Branch, Notification No. 339-187-R., dated the 18th April 1904;

Agreement, dated the 11th October 1905, *between the Government of the United Provinces of Agra and Oudh and Messrs. Martin and Company of Calcutta (called "the Promoters"), for and on behalf of the Shahdara (Delhi)-Saharanpur Light Railway Company*, published under the Government of the United Provinces of Agra and Oudh, Public Works Department, Railway Branch, Notification No. 1363-R.-187, dated the 22nd November 1905;

} as to the construction, maintenance and working of the line from Shahdara to Saharanpur.

Main provisions of Local Government order and agreement—

(i) *Land.*—
(ii) *Government aid.*—

The Local Government provide free of charge for the purposes of the railway sufficient land for a single 5′ 6″ gauge line, together with land for all conveniences and works approved under clause 8 of the agreement; in addition to this the Company are authorised to use for the purpose of the railway, but not for the purpose of any building or erection connected therewith, portions not exceeding six feet in width of the local roads passing between Shahdara and Saharanpur.

(iii) *Distribution of profits.*—Surplus profits in any year in excess of 4 per cent. upon the paid-up capital of the Company shall be divided equally between the Government and the Company; payments on account but subject to adjustment being made at close of first half-year.

(iv) *Rates and fares.*—Control over rates and fares, vests in the local Government, subject to directions issued by the Government of India. Directions issued have taken the form of prescribing maximum and minimum rates and fares.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.

(*b*) Government bullion and coin, and the persons in charge thereof.

} *Nil.*

(vi) *Power of the Government to determine agreement.*—Upon the expiration of 21 years after the date of opening, or 23 years from the date of the Local Government order sanctioning the construction of the line, whichever is earlier, or at the end of every seven years thereafter, the Local Government have, by giving 12 months' previous notice, the right of terminating the agreement by paying to the Company the value calculated at 25 years' purchase of the average annual profits of the Company for the preceding three years, subject to a minimum of the capital expended and a maximum of 25 per cent. in excess of that sum. In the event of its being determined to construct a railway on a different gauge in place of the tramway, and if the Government and the Company fail to agree that the alteration shall be made by the Company, then and in such case, the Government have the right to acquire the tramway at any time on giving 12 months' notice in writing and paying to the Company a sum 25 per cent. in excess of its capital expenditure.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement [if not determined under* (vi)].—None specified.

13. SHAHDARA (DELHI)-SAHARANPUR LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix to the Report for 1913-14).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Moiety of surplus profit paid to United Provinces Government.	Total Income.	Percentage of total Income on total capital outlay as given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.	Amount credited to Renewal Reserve Account.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.		Rs.
1913-14 .	92·50	43,42,421	6,17,500	3,48,514	8·02	91,286	2,57,228	5·92	128	43·53	
1914-15 .	92·50	43,89,762	6,48,190	3,57,708	8·14	93,128	2,64,580	6·02	134	44·76	
1915-16 .	92·50	44,13,488	5,49,809	2,80,278	6·35	53,230	2,27,046	5·14	114	49·08	
1916-17 .	92·50	44,11,392	6,68,824	3,92,996	8·90	1,10,678	2,82,318	6·39	139	41·23	
1917-18 .	92·50	44,63,101	7,15,494	3,70,892	8·31	1,03,083	2,67,809	6·00	148	48·17	
1918-19 .	92·50	45,14,868	7,94,163	3,80,011	8·41	1,04,686	2,75,325	6·09	165	52·15	
1919-20 .	92·50	45,71,187	7,57,370	3,21,156	7·02	72,385	2,48,771	5·44	157	57·59	
1920-21 .	92·50	45,50,806	8,39,967	3,36,646	7·40	78,323	2,58,323	5·67	176	59·92	
1921-22	92·50	47,14,872	8,65,085	3,17,176	6·73	68,587	2,48,589	5·27	179	63·32	
1922-23 .	92·50	47,28,307	10,69,978	5,68,586	12·02	1,94,292	3,74,294	7·91	222	46·86	
1923-24 .	92·50	47,06,052	10,27,917	5,93,152	12·60	2,06,576	3,86,576	8·21	213	42·28	
1924-25 .	92·50	47,62,496	11,64,238	6,79,859	14·27	2,49,745	4,30,114	9·03	242	41·60	
1925-26 .	92·50	49,93,212	10,21,943	5,00,917	10·03	1,57,857	3,43,060	6·87	212	50·98	
1926-27 .	92·50	49,84,811	9,60,590	4,61,794	9·26	1,19,033	3,42,763	6·87	199	51·92	
1927-28 .	92·50	50,01,304	10,33,153	5,72,225	11·44	1,75,568	3,95,657	7·91	214	44·60	
1928-29 .	92·50	50,00,461	10,53,171	6,05,794	12·11	1,77,632	4,28,162	8·56	219	42·47	
1929-30 .	92·50	50,02,739	10,58,804	5,98,664	11·97	1,72,954	4,25,710	8·51	220	43·45	
1930-31 .	92·50	50,21,622	8,96,412	4,69,300	9·30	1,08,073	3,61,227	7·19	186	47·64	
1931-32 .	92·50	49,95,301	8,31,309	4,32,057	8·65	90,081	3,41,976	6·85	173	48·03	
1932-33 .	92·50	49,94,304	8,85,806	4,63,349	9·28	1,05,967	3,57,382	7·15	184	47·69	42,500
1933-34 .	92·50	50,37,005	10,16,421	5,76,302	11·40	1,53,581	4,22,721	8·39	211	43·18	85,000
1934-35 .	92·50	50,67,084	8,32,327	3,95,649	7·80	54,832	3,40,817	6·72	173	52·40	85,000
1935-36 .	92·50	51,01,109	9,06,482	4,43,156	8·68	1,30,358	3,12,798	6·13	188	51·10	95,000
1936-37 .	92·50	51,13,325	9,66,099	4,81,014	9·40	1,12,232	3,68,782	7·21	201	50·20	85,000
1937-38 .	92·50	52,76,614	10,62,342	5,76,939	10·93	1,70,105	4,06,834	7·71	221	45·69	85,000
1938-39 .	92·50	51,30,050	9,33,503	4,62,502	9·01	87,453	3,75,067	7·31	194	50·45	85,000

CLASS III RAILWAYS.

With gross earnings of Rs. 10 lakhs and under a year.

1. ADEN RAILWAY (3′ 3⅜″ gauge)—

The Railway is closed for public traffic from 1st August 1929.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State *pertaining to each year.*	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1915-16 .	7·00	2,88,292	21,167	—6,096	..	5,005	—11,101	232	128·80
1916-17 .	7·00	6,21,816	1,46,456	32,673	5·25	15,000	17,673	402	77·69
1917-18 .	7·00	6,67,368	1,42,933	—28,202	..	22,427	—50,629	393	119·73
1918-19 .	22·50	3,88,701*	1,99,673	10,370	2·66	18,385	—8,015	423	94·81
1919-20 .	28·75	6,25,609	3,60,123	32,920	5·26	14,386	18,534	289	90·86
1920-21 .	28·75	14,00,084†	2,71,600	—76,121	...	30,342	—1,06,463	182	128·02
1921-22 .	28·75	15,45,249†	2,49,681	—90,698	...	50,041	—1,40,739	167	136·32
1922-23 .	28·75	16,54,809†	2,25,397	—69,328	...	58,409	—1,27,737	151	130·75
1923-24 .	28·75	17,40,493†	2,01,573	—64,991	...	68,043	—1,33,034	135	132·24
1924-25 .	28·75	17,26,944‡	1,82,513	—15,028	...	69,374	—84,402	122	108·23
1925-26 .	28·75	17,28,373†	1,39,094	—61,206	...	70,285	—1,31,491	93	144·00
1926-27 .	28·75	17,23,898†	1,41,799	63,491	3·68	68,225	—4,734	95	55·18
1927-28 .	28·75	16,28,246†	1,31,579	—1,27,051	..	65,515	—1,92,566	88	196·56
1928-29 .	28·75	16,16,265†	1,60,272	—12,880	—0·80	64,946	—77,826	107	108·04
1929-30 .	(*a*)	4,56,262	47,199	—9,27,546	—203·3	37,039	—9,64,585	..	2,065·18
1930-31 .	(*a*)	4,52,600	2,778	—4,021	—0·89	11,135	—15,156	..	244·74
1931-32 .	(*a*)	309	..	—4,41,280	..	1,661	—4,39,619	..	..
1932-33	(*a*)	...	..	+91,758	..	—13,764	1,05,522	..	..

* The reduction, as compared with the previous year, is due to heavy increase in the credit balance under the suspense head "Purchase," value of certain materials obtained during the year having been paid in the following year, *viz.*, 1919-20.

† Includes expenditure booked in the Military Department.

‡ The reduction as compared with the previous year is chiefly due to credits to final heads.

(*a*) Due to the closing of the railway from 1st August 1929.

2. AHMADPUR-KATWA RAILWAY (2' 6" gauge).

Managing Agents.—Messrs. McLeod & Co., Calcutta.

Date of registration of the Company.—3rd November 1915.

Sanction to the construction of this line by the Ahmadpur-Katwa Railway Company was conveyed in Railway Board's Notification No. 314, dated the 16th November 1914.

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4
Ahmadpur to Pachandi	30-5-17	24·62	
Pachandi to Katwa	29-9-17	7·64	
Total	..	..	32·26

Details of construction—

Permanent-way.—The permanent-way consists of new 35-lb. flat-footed and 2nd-hand 50-lb. rails laid on sâl sleepers.

Ballast.—The line is ballasted with moorum, except in station yards and on open top bridge approaches where stone or brick ballast is used.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Contract—

Dated the 8th May 1922, *between the Secretary of State and the Ahmadpur-Katwa Railway Company, Limited*, as to the construction, maintenance and working of the line.

Main provisions of contract—

The same as noted under Burdwan-Katwa Railway, except that the earliest date when the Secretary of State may determine the contract, by giving 12 months' previous 'Notice of purchase', is 31st March 1948.

Statistics of working—

Year. 1	Mileage open at end of each year. 2	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction. 3	Gross earnings. 4	Net earnings. 5	Percentage of net earnings on total capital outlay given in column (3) 6	Guaranteed interest recoverable from Government. 7	Total income. 8	Percentage of total income on total capital outlay given in column (3). 9	Earnings per mile per week. 10	Proportion of expenses to earnings. 11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1917-18	32·26	19,50,145	54,497	—780	..	30,170	29,390	1·51	43	101·45
1918-19	32·26	19,65,836	94,197	—23,602	..	83,942	60,340	3·07	56	125·06
1919-20	32·26	19,74,361	1,22,315	46,589	2·36	44,903	91,492	4·63	73	61·91
1920-21	32·26	19,76,164	1,35,114	14,286	0·72	58,227	72,513	3·67	81	89·43
1921-22	32·26	19,82,474	1,24,624	—11,749	..	85,971	74,222	3·74	74	109·42
1922-23	32·26	20,34,873	1,30,486	—14,769	..	90,626	75,857	3·73	78	11·32
1923-24	32·26	20,11,641	1,27,506	17,218	0·85	58,230	75,448	3·75	76	86·49
1924-25	32·26	19,93,377	1,35,687	20,482	1·03	54,925	75,407	3·78	81	84·90
1925-26	32·26	19,89,418	1,66,325	46,001	2·31	27,476	73,477	3·69	99	72·34
1926-27	32·26	20,02,891	1,52,890	26,776	1·34	46,331	73,107	3·65	91	82·49
1927-28	32·26	20,28,957	1,38,573	10,435	0·51	64,336	74,771	3·69	83	92·47
1928-29	32·26	20,36,005	1,20,098	—23,046	—1·13	99,848	76,802	3·77	72	119·19
1929-30	32·26	20,51,587	1,34,194	3,909	0·19	72,983	76,892	3·75	80	97·09
1930-31	32·26	20,76,727	1,16,476	—20,046	—0·96	97,935	77,889	3·75	69	117·21
1931-32	32·26	20,76,704	1,10,258	13,324	0·64	66,146	79,470	3·83	66	87·92
1932-33	32·26	20,73,299	1,15,325	22,471	1·08	55,062	77,533	3·74	69	80·52
1933-34	32·26	20,73,277	1,11,292	13,232	0·64	63,842	77,074	3·72	66	88·11
1934-35	32·26	20,72,648	1,06,613	15,817	0·76	62,319	78,136	3·77	64	85·16
1935-36	32·26	20,72,648	87,757	3,292	0·16	74,433	77,725	3·75	52	96·25
1936-37	32·26	20,72,387	84,769	—11,577	—0·53	89,578	78,001	3·76	51	113·66
1937-38	32·26	20,72,387	99,366	2,433	0·12	74,492	76,925	3·71	59	97·55
1938-39	32·26	20,74,705	1,06,377	4,384	0·21	69,783	74,167	3·57	63	95·88

3. ARRAH-SASARAM LIGHT RAILWAY (2′ 6″ gauge).

Managing Agents.—Messrs. Martin & Co., Calcutta.

Date of registration of the Company.—19th October 1909.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Remarks.
1	2	3	4	5
Arrah to Sasaram	6-3-11	60·50		
Sasaram to Tarachandi Hill	12-11-14	*4·66		* For goods traffic only.
Total . . .	..	..	65·16	

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails on sâl sleepers

Ballast.—The line is ballasted with broken stone and moorum.

Fencing.—The line is unfenced except at certain station yards.

Curves.—The sharpest curve is of 573 feet radius between Arrah and Sasaram and 382 feet between Sasaram and Tarachandi Hill.

Gradients.—The ruling gradient is 1 in 250 between Arrah and Sasaram, and 1 in 100 between Sasaram and Tarachandi Hill.

Local Government orders and agreements—

The Arrah-Sasaram Tramway Company order published under the Bengal Government, Railway Department, Notification No. 39-R., dated the 12th October 1909, authorizing the construction of a line from Arrah to Sasaram in the district of Shahabad.

Agreement, dated the 15th October 1909, *between the District Board of Shahabad and Messrs. Martin and Company of Calcutta (called "the Promoters"), by and on behalf of the Arrah-Sasaram Light Railway Company*, as to the grant of a concession to the Company of the right to construct and work the line.

Agreement, dated the 30th October 1912 (supplemental to the agreement of 15th October 1909), *between the District Board of Shahabad and the Arrah-Sasaram Light Railway Company*;

The Arrah-Sasaram Tarachandi Hill extension order published under the Bihar and Orissa Government, Railway Department, Notification No. 4760-R., dated the 8th September 1913;

} as to the construction, maintenance and working of the extension from Sasaram to Tarachandi Hill as a part of the Arrah-Sasaram Light railway.

Main provisions of Local Government orders and agreements—

(i) *Land.*—Provided at the cost of the Company, except one side of the district road the free use of which is authorised.

(ii) *Aid by the Local authority.*—The District Board of Shahabad recommend and apply to the Local Government to exempt the Company from the tax on account of road cess, or to exact only a nominal tax, for a period of 21 years from the date when the line is opened for traffic, with power of renewal. The Board also guarantee to supplement the net earnings of the Company by such annual subsidy as may be necessary to allow of it paying a dividend of 4 per cent. per annum on their share capital, provided that the total liability of the Board on this account in any one year shall not exceed Rs. 88,000 or the sum of 4 per cent. on the Company's share capital whichever is less.

(iii) *Distribution of profits.*—Surplus profits in excess of 4 per cent., after setting aside such funds as the Directors may decide, on the capital for the time being of the Company, are divisible equally between the District Board of Shahabad and the Company.

(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and the adoption of the General Classification of goods with separate maximum and minimum rates for goods of the different classes have been prescribed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, postal officers and servants on duty.—To be conveyed at the rates and on the conditions in force from time to time on State railways.

(*b*) Troops, police, high Government officials and Government stores.—

(*c*) Government bullion and coin, and the persons in charge thereof.—

} *Nil*

(vi) *Power of the Local authority to determine agreement.*—Upon the expiration of 21 years from the date of the Local Government order authorizing the construction of the line, or at the end of every 7

3. ARRAH-SASARAM LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Main provisions of Local Government orders and agreements—*concld.*

years thereafter, the District Board have, by giving six months' previous notice, the right of purchasing the line by paying to the Company 25 times the average yearly net earnings of the 3 years preceding the purchase, subject to a maximum of 120 and minimum of 100 per cent. of the capital cost.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement [if not determind under* (vi)].—Not specified.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 1 to the Railway Administration Report for 1913-14).

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Amount credited to Renewal Reserve Account.	Subsidy from (+), or share of surplus profits to (—), the District Board.	Total income (column 5 minus column 7 and plus or minus column 8).	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.			Rs.	Rs.		Rs.	
1913-14 .	60·50	22,31,449	1,94,799	71,403	3·20	..	+17,932	89,335	4·00	62	63·34
1914-15 .	65·26	22,75,170	2,12,951	88,320	3·88	..	+253	88,573	3·89	63	58·52
1915-16 .	65·16	22,88,079	1,96,050	79,328	3·46	..	+13,256	92,584	4·04	58	59·53
1916-17 .	65·16	22,80,626	2,26,342	1,00,239	4·39	..	..	1,00,239	4·39	67	55·71
1917-18 .	65·16	22,67,557	2,53,527	1,36,342	6·01	25,000	—7,394	1,03,948	4·58	75	46·22
1918-19 .	65·16	22,58,480	2,47,766	1,16,406	5·15	8,000	—5,196	1,03,210	4·57	73	53·01
1919-20 .	65·16	22,68,185	2,79,390	1,14,181	5·03	5,000	—5,873	1,03,308	4·55	82	59·13
1920-21 .	65·16	22,65,007	2,89,000	1,09,564	4·83	..	—6,326	1,03,238	4·55	85	62·08
1921-22 .	65·16	23,18,908	3,02,312	1,04,205	4·49	..	..	1,04,205	4·49	89	65·53
1922-23 .	65·16	23,38,807	3,70,882	1,59,786	6·83	10,000	—23,735	1,26,051	5·39	109	56·91
1923-24 .	65·16	23,44,041	3,47,582	1,32,904	5·67	10,000	—11,596	1,11,308	4·75	102	61·76
1924-25 .	65·16	23,41,015	3 61,821	1,27,145	5·43	20,000	—8,460	98,685	4·22	106	64 86
1925-26 .	65·16	23,46,452	3,72,101	1,52,631	6·50	20,000	—11,509	1,21,122	5·16	109	58·98
1926-27 .	65·16	23,41,561	4,13,505	2,05,261	8·76	40,000	—20,333	1,44,928	6·19	122	50·36
1927-28 .	65·16	23,50,610	4,11,128	1,54,753	6·51	20,000	—19,230	1,15,523	4·91	121	62·33
1928-29 .	65·16	23,73,208	3,77,124	1,42,078	5·98	10,000	—11,467	1,20,611	5·08	111	62·32
1929-30 .	65·16	25,54,964	4,32,658	1,65,915	6·57	40,000	—20,003	1,05,912	5·78	128	61·66
1930-31 .	65·16	25,16,585	4,17,530	1,32,897	5·30	60,000	—1,682	71,215	2·83	123	68·17
1931-32 .	65·16	25,08,734	3,86,333	1,04,727	4·17	70,000	+17,805	52,532	2·09	114	72·89
1932-33 .	65·16	25,19,857	3,56,969	90,071	3·57	80,000	+31,857	41,928	1·66	105	74·79
1933-34 .	65·16	25,11,669	3,03,968	39,280	1·56	80,000	+77,330	1,16,610	4·64	90	87·08
1934-35 .	65·16	25,19,885	3,53,506	1,06,892	4·20	50,000	—10,156	96,736	4·20	104	69·70
1935-36 .	65·16	25,57,160	3,55,671	1,16,385	4·55	50,000	—6,132	1,10,253	4·31	105	67·20
1936-37 .	65·16	25,52,169	3,27,322	1,00,397	3·90	47,048	+2,446	1,02,843	4·03	97	69·30
1937-38 .	65·16	25,58,156	3,43,743	1,10,726	4·32	50,000	+12,012	1,22,738	4·79	101	67·79
1938-39 .	65·16	25,62,452	3,82,063	1,33,466	5·21	50,000	+7,226	1,40,692	5·49	113	65·06

4. BANKURA-DAMOODAR RIVER RAILWAY (2′ 6″ gauge).

Managing Agents.—Messrs. McLeod & Co., Calcutta

Date of registration of the Company.—30th March 1914.

Sanction to the construction of this line by the Bankura-Damoodar River Railway Company was conveyed in Railway Board's Notification No. 103, dated the 1st May 1914.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bankura to Indas	15-12-16	42·34	
Indas to Sehara Bazar	1-4-17	11·66	
Sehara Bazar to Rainagar	6-6-17	5·95	
TOTAL	..	..	59·95

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb flat-footed British standard section rails laid on sal sleepers.

Ballast.—Moorum is used on embankments and brick in cuttings.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 310 feet at Bankura.

Gradients.—The ruling gradient is 1 in 150.

Contract—

Dated the 6th September 1918, *between the Secretary of State and the Bankura-Damoodar River Railway Company, Limited,* as to the construction, maintenance and working of the line.

Main provisions of contract—

The same as noted under Burdwan-Katwa Railway, except the earliest date when the Secretary of State may, by giving 12 months' previous "Notice of purchase" determine the contract, which is 31st March 1947.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Guaranteed interest recoverable from Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1916-17	42·69	33,93,875	22,433	2,485	0·07	..	..	..	10	88·92
1917-18	59·95	35,57,279	1,28,046	6,928	0·19	59,489	66,417	1·87	41	94·58
1918-19	59·95	35,43,089	1,83,444	14,618	0·41	1,04,382	1,19,300	3·36	59	92·03
1919-20	59·95	35,49,983	2,26,327	82,530	2·32	57,079	1,39,609	3·93	73	63·53
1920-21	59·95	35,71,273	1,75,548	4,139	0·12	1,22,337	1,26,476	3·54	56	97·64
1921-22	59·95	36,34,462	1,95,998	7,883	0·22	1,22,720	1,30,603	3·59	63	95·98
1922-23	59·95	36,55,386	1,79,891	—48,545	..	1,81,163	1,32,618	3·63	58	126·99
1923-24	59·95	36,50,919	1,99,030	43,621	1·19	86,909	1,30,530	3·58	64	78·08
1924-25	59·95	36,37,036	2,21,827	40,621	1·12	88,518	1,29,139	3·55	71	81·69
1925-26	59·95	36,37,323	2,53,581	25,547	0·70	1,03,026	1,28,573	3·53	72	88·57
1926-27	59·95	37,20,710	2,14,525	14,808	0·40	1,16,651	1,31,459	3·53	69	93·10
1927-28	59·95	38,06,152	2,11,574	—16,591	..	1,56,331	1,39,740	3·67	68	107·84
1928-29	59·95	38,40,152	1,82,486	—53,253	—1·39	1,97,427	1,44,174	3·75	59	129·18
1929-30	59·95	39,84,350	2,02,261	—27,571	—0·69	1,74,336	1,46,765	3·68	65	113·63
1930-31	59.95	40,18,583	1,62,248	—69,457	—1·74	2,24,186	1,54,729	3·85	52	142·81
1931-32	59·95	40,28,744	1,50,916	—33,133	—0·82	1,90,459	1,57,326	3·91	48	121·95
1932-33	59·95	40,17,135	1,50,438	11,772	0·29	1,38,247	1,50,019	3·73	48	92·17
1933-34	59·95	40,16,973	1,61,592	20,474	0·51	1,26,372	1,46,846	3·66	52	87·33
1934-35	59·95	40,07,447	1,33,283	2,283	0·06	1,45,288	1,47,571	3·68	43	98·29
1935-36	59·95	40,01,461	1,10,745	—34,642	—0·87	1,82,165	1,47,523	3·69	36	131·28
1936-37	59·95	40,18,777	1,14,148	—9,643	—0·25	1,57,043	1,47,400	3·67	37	108·45
1937-38	59·95	40,21,254	1,18,950	—15,406	..	1,56,527	1,41,121	3·50	38	112·95
1938-39	59·95	40,10,841	1,26,536	—15,713	..	1,55,673	1,39,960	3·49	41	112.42

5. BARASET-BASIRHAT LIGHT RAILWAY (2′ 6″ gauge).

Managing Agents.—Messrs. Martin & Co., Calcutta.

Date of registration of the Company.—30th July 1903.

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	Grand total. 5
Main line—				
Baraset to Basirhat	1-2-05	26·00		
Basirhat to Chingrighata	2-3-09	8·50		
			34·50	
Shambazar branch—				
Beliaghata Bridge to Pattipooker	16-2-10	16·62		
Pattipooker to Belgatchia (Shambazar)	2-10-14	1·12		
			17·74	
Grand total	..	..	..	52·24

Details of construction—

Permanent-way.—The permanent-way consists of 30 lb. flat-footed steel rails on sâl sleepers except 328 miles which is of 41¼ lbs F.F. rails.

Ballast.—The line is ballasted with broken brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 414 feet.

Gradients.—The ruling gradient is 1 in 250.

Agreements and Local Government orders—

Agreement, dated the 14th December 1897 (called the principal agreement), *between the District Board of the 24-Parganas and Messrs. Martin and Company on behalf of the Baraset-Basirhat Tramway Company, Limited*, as to the grant of a concession to theTramway Company by the District Board;

Agreement, dated the 14th May 1902 (supplemental to the agreement of 1897), *between the District Board of the 24-Parganas and Messrs. Martin and Company on behalf of the Baraset-Basirhat Tramway Company, Limited*, modifying clause 4 of the agreement of 1897;

The Baraset-Basirhat Tramway Company order, published under the *Bengal Government, Railway Department Notification No. 86-R., dated the 15th May 1903*;

} as to the construction, maintenance and working of the line from Baraset to Basirhat.

Agreement, dated the 3rd August 1903, *between the District Board of the 24-Parganas, Messrs. Martin and Company and the Baraset-Basirhat Light Railway Company, Limited*, as to the adoption as between the Board and the new Railway Company of the agreement of 1897, as modified by the agreement of 1902, and as to the discharge of the Promoters from all liability thereunder or in respect thereof.

Agreement, dated the 6th November 1907 (supplemental to the agreements of 1897, 1902 and 1903), *between the District Board of the 24-Parganas and the Baraset-Basirhat Light Railway Company, Limited*;

The Baraset-Basirhat-Taki Extension order, published under the *Bengal Government, Railway Department Notification No. 22-R., dated the 23rd November 1907*;

} as to the construction, maintenance and working of the extension from Basirhat to Taki and Hosanabad as a part of the Baraset-Basirhat Light Railway.

Agreement, dated the 21st December 1908 (supplemental to the agreements of 1897, 1902, 1903 and 1907), *between the District Board of the 24-Parganas and the Baraset-Basirhat Light Railway Company, Limited*;

The Baraset-Basirhat-Pattipooker Extension order, published under the *Bengal Government, Railway Department Notification No. 9-R., dated the 19th February 1909*;

} as to the construction, maintenance and working of an extension from Beliaghata bridge to Pattipooker, as part of the Baraset-Basirhat Light Railway.

Agreement, dated the 7th August 1914 (supplemental to the aforesaid agreements), *between the District Board of the 24-Parganas and the Baraset-Basirhat Light Railway Company, Limited*;

The Baraset-Basirhat-Belgatchia Extension order, published under the *Bengal Government Railway Department, Notification No. 12-R., dated the 15th August 1914*;

} as to the construction maintenance and working of an extension from Pattipooker to Belgatchia as part of the Baraset-Basirhat Light Railway.

5. BARASET-BASIRHAT LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Main provisions of agreements and Local Government orders—

(i) *Land.*—Land, other than portions of the Calcutta-Jessore Road and the District Road between Baraset and Taki, the free use of which in perpetuity is authorised by the Local Government and the District Board, respectively, provided at the cost of Company's capital.

(ii) *Aid by the District Board.*—The District Board recommend and apply to the Local Government either to exempt the Company from the road cess or to exact only a nominal tax for a period of 21 years from the date when the line is opened for traffic, with power of renewal. The District Board also guarantee such an annual subsidy as may be necessary to make the net profits of the Company equal to Rs. 1,500 per mile of line open, provided that the total contribution by the Board does not exceed Rs. 38,000 per annum, being 4 per cent. on the amount of the Company's share capital.

(iii) *Distribution of profits.*—Surplus profits in excess of 4 per cent. after setting aside such sums as the Directors may decide, on the Company's share capital are divisible equally between the District Board and the Company.

(iv) *Rates and fares.*—Certain maxima fares for passengers, and a tariff of charges for goods have been fixed.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails and Postal officers and servants on duty.—At the rates, and on the condition in force from time to time on State railways.

(*b*) Troops, police, high Government officials and Government stores —
(*c*) Government bullion and coin, and the persons in charge thereof— } *Nil.*

(vi) *Power of the District Board to determine agreement.*—Upon the expiration of 21 years from the date of the Local Government order authorising the construction of the line, or at the end of every 7 years thereafter, the District Board, by giving 6 months' notice, can purchase the undertaking by paying to the Company 20 times the average net annual profits of the 4 years preceding the transaction, together with a bonus of 20 per cent. thereon.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Terms of agreement [if not determined under* (vi)].—Not specified.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14).

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Amount credited to Renewal Reserve Account.	Share of net profits paid to the District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	
1913-14 .	51·12	23,08,116	3,28,574	1,36,598	5·91	10,000	16,052	1,10,546	4·78	124	58·42
1914-15 .	52·24	23,99,927	3,48,960	1,33,617	5·56	19,000	10,348	1,04,269	4·34	128	61·71
1915-16 .	2·24	23,80,575	3,74,450	1,52,380	6·40	20,000	16,010	1,16,370	4·89	138	59·30
1916-17 .	52·24	23,81,739	3,57,024	1,35,415	5·69	12,500	12,932	1,09,983	4·61	131	62·07
1917-18 .	52·24	23,85,399	3,08,313	92,778	3·89	*Nil*	2,624	90,154	3·77	113	69·90
1918-19 .	52·24	23,85,839	3,44,840	1,38,106	5·78	17,500	11,450	1,09,156	4·57	127	59 95
1919-20 .	52·24	23,94,491	4,05,553	1,65,830	6·93	35,000	16,349	1,14,481	4·78	149	59·11
1920-21 .	52·24	24,19,571	4,41,193	2,10,531	8·70	55,000	27,376	1,28,155	5·29	163	52·26
1921-22 .	52·24	24,35,544	4,42,659	1,54,397	6·34	17,000	20,804	1,16,593	4·79	162	65·12
1922-23 .	52·24	24,60,474	4,91,362	1,82,919	7·43	20,000	31,930	1,30,989	5·32	180	62·76
1923-24 .	52·24	24,16,722	5,22,434	2,03,295	8·41	25,000	43,959	1,34,336	5·55	192	61·09
1924-25 .	52·24	24,23,763	5,81,603	2,62,737	10 84	60,000	49,953	1,52,784	·30	214	54·82
1925-26 .	52·24	24,20,010	6,14,789	3,10,494	12·83	60,000	66,840	1,83,654	7·59	226	49·49
1926-27 .	52·24	24,27,025	5,67,050	2,07,529	8·55	40,000	27,817	1,39,712	5·67	208	63·40
1927-28 .	52·24	25,12,125	5,81,498	1,93,542	7·70	20,000	43,723	1,49,819	5·96	214	66·71
1928-29 .	52·24	25,47,971	5,64,721	1,52,148	5·97	17,500	19,906	1,32,242	5·54	208	73·05
1929-30 .	52·24	26,0·,815	6,26,210	1,61,706	6·21	65 000	24,751	1,36,955	5·26	231	74·18
1930-31 .	52·24	25,62,733	5,75,194	1,32,597	5·17	40 000	6,235	1,26,362	4·93	212	76·95
1931-32 .	52·24	25,53,541	5,57,070	1,29,956	5·09	40,000	4,698	1,25,258	4·91	205	76·67
1932-33 .	52·24	25,65,481	4,51,690	74,206	2·89	20,000	33,773	87,979	3·43	166	83·57
1933-34 .	52·24	25,63,388	5,53,500	1,31,833	5·11	70,000	12,089	1,19,744	4·63	204	76·50
1934-35 .	52·24	25,76,663	4,96,316	95,746	3·71	50,000	*Nil*	95,746	3·71	183	80·70
1935-36 .	52·24	26,06,022	5,46,165	1,11,840	4·29	72,000	8,386	1,03,454	3·96	201	79·51
1936-37 .	52·24	26,36,638	4,21,180	28,362	1·00	60,000	38,000	66,362	2·51	155	93·20
1937-38 .	52·24	26,32,666	4,96,611	1,01,782	3·86	57,000	400	1,01,382	3·85	183	79·50
1938-30 .	52·24	26,46,968	4,03,204	—2,169	0·08	65,000	38,000	35,831	1·35	148	100·52

6. BENGAL PROVINCIAL RAILWAY SYSTEM.

Lines comprised in the system—The Bengal Provincial railway system is made up of—

	Miles.
(*a*) Bengal Provincial railway (2′ 6″ gauge)	33·27
(*b*) Dasghara-Jamalpurgunj railway (2′ 6″ gauge)	8·31
Total . .	41·58

(*a*) Bengal Provincial railway (2′ 6″ gauge) –

Date of registration of the Company—1890.

Progress in opening—

Sections of railway	Date of opening.	Miles.	Total.
1	2	3	4
Tarkessur to Rudrani	7-11-94	12·50	
Rudrani to Magra	8-3-95	18·62	
Magra to Tribeni	14-4-04	2·15	
TOTAL .	..	..	33·27

Details of construction—

Permanent way —The permanent way of the main line consists of 30-lb flat-footed steel rails laid for 10 miles on steel transverse sleepers and for the remainder on pynkado and sâl sleepers. The Tribeni extension is laid on sâl sleepers

Ballast.—Sand and broken brick

Fencing.—The line is partially fenced.

Curves.—The sharpest curve is of 716·25 feet radius.

Gradients.—The ruling gradient on the main line is 1 in 1,000 ; there are short gradients of 1 in 500 to 1 in 700 at bridge approaches ; from the bridge under the East Indian Railway to Magragunj station the line is on a gradient of 1 in 350 The ruling gradient on the Tribeni extension is 1 in 500.

Agreements and Local Government order—

Agreement, dated the 16th October 1890, *between the District Board of Hooghly and the Promoters of the Bengal Provincial Railway Company*, scheduled to the order quoted below ;

The Bengal Provincial Railway Company order, published under the Bengal Government, Railway Department, Notification No. 1, dated the 4th January 1896.

} as to the construction, maintenance and working of the line from Tarkessur to Magra.

Agreement, dated the 12th March 1904, *between the Secretary of State and the Bengal Provincial Railway Company*, as to the construction, maintenance and working of the extension from Magra station to Tribeni bathing ghat on the Hooghly river.

Main provisions of agreements and Local Government order—

(i) *Land*—
(ii) *Government aid.*— } Land required for the purposes of the main line, from Tarkessur to Magra acquired by the Government of Bengal at the cost of the Company ; and that for the extension from Magra station to Tribeni Ghat on the Hooghly river provided by Government free from rent or other charges.

(iii) *Distribution of profits.*—The profits goto the Company.

(iv) *Rates and fares.*—Certain maximum fares for passengers and maximum and minimum rates for goods traffic, combined with the General Classification of goods of the Indian Railway Conference Association, which are usual on Indian 5′ 6″ gauge railways, have been fixed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, Postal officers and servants on duty.—To be conveyed at the rates and on the conditions in force from time to time on State railways.

(*b*) Troops, police, high Government officials and Government stores.—
(*c*) Government bullion and coin, and the persons in charge thereof.— } *Nil*

(vi) *Power of the Local Authority to determine agreement.*—In the event of the District Board of Hooghly wishing to purchase the railway at the end of 21 years after the date of the Government order sanctioning the construction of the railway, or at the end of every 7 years thereafter, the promoters bind themselves to make it over at a price two-fifths in excess of the original capital outlay.

6. BENGAL PROVINCIAL RAILWAY SYSTEM—*contd.*

(a) Bengal Provincial Railway (2′ 6″ gauge)—*concld.*

Main provisions of agreements and Local Government order—*concld.*

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement [if not determined under* (vi)].—None specified.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	33·27	11,55,833	1,43,439	46,813	4·05	78	65·15
1914-15	33·27	11,77,092	1,42,956	47,446	4·03	82	66·81
1915-16	33·27	11,85,224	1,40,725	44,784	3·78	81	68·18
1916-17	33·27	11,89,222	1,27,795	33,168	2·79	73	74·04
1917-18	33·27	11,97,510	1,08,861	11,943	1·00	63	89·03
1918-19	33·27	11,93,942	1,26,138	24,020	2·01	73	80·96
1919-20	33·27	11,96,936	1,36,107	30,256	2·53	78	77·77
1920-21	33·27	11,92,391	1,33,606	18,280	1·53	77	86·32
1921-22	33·27	11,47,790	1,44,465	10,841	0 94	83	92·50
1922-23	33·27	11,87,567	1,22,023	2,662	0·22	70	97·83
1923-24	33·27	11,82,473	1,50,895	36,814	3·11	87	75·60
1924-25	33·27	11,79,896	1,60,093	51,145	4 33	92	68·05
1925-26	33·27	11,90,026	1,65,139	47,050	3·95	95	71·51
1926-27	33·27	11,90,108	1,61,745	43,181	3·62	94	73·30
1927-28	33·27	11,84,526	1,62,818	21,028	1·77	71	87·09
1928-29	33·27	11,84,552	1,51,032	30,730	2·59	87	79·65
1929-30	33·27	11,81,840	1,54,422	44,237	3·74	89	71·36
1930-31	33·27	11,84,261	1,34,473	7,324	0·62	77	94·55
1931-32	33·27	*11,81,837	1,15,832	16,189	1·37	67	86·02
1932-33	33·27	11,85,010	1,10,002	10,712	0·09	63	90·26
1933-34	33·27	11,80,747	1,06,857	6,790	0·06	61	93·65
1934-35	33·27	11,80,177	96,212	5,747	0·49	55	94·03
1935-36	33·27	11,75,020	76,271	—3,561	..	44	104·65
1936-37	33·27	11,74,180	86,940	4,601	0·39	50	94·70
1937-38	33·27	11,70,900	95,250	7,880	0·67	51	91·79
1938-39	33·27	11,70,050	94,550	7,980	0·68	55	91·54

(b) Dasghara-Jamalpurgunj railway (2′ 6″ gauge).—

The line is owned by the Bengal Provincial Railway Company. Sanction to its construction was conveyed in Railway Board's Notification No. 38, dated the 17th February 1915.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Dasghara to Jamalpurgunj	1-9-17	8·31	8·31

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. and 41¼-lb. flat-footed steel rails on sal sleepers.

Ballast.—The line is partly ballasted.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 955 feet radius.

Gradients.—The ruling gradient is 1 in 500.

Contract—

Dated the 1st August 1919, *between the Secretary of State and the Bengal Provincial Railway Company* as to the construction, maintenance and working of the Dasghara-Jamalpurgunj railway.

Main provisions of contract—

(i) *Land.*—Land in British territory provided free of cost to the Company.

(ii) *Government aid.*—When the net receipts shall not be sufficient to pay interest at the rate of 3½ per cent. per annum on the paid up share capital of the Company in respect of this railway, the Secretary of State shall pay such a sum as shall, together with a proportion, specified below, of the net receipts, make up an amount equal to interest at 3½ per cent. on the same proportion of the share capital. The proportion referred to is that which the paid up share capital, less any capital spent on additional rolling-stock provided in respect of this railway, bears to its paid up capital.

(iii) *Terms of working.*—The line is managed, maintained, provided with rolling-stock and worked for the same percentage of its gross earnings as the working expenses of the whole system bear to the gross earnings of that system, provided that the working expenses of this line shall not exceed 50 per cent. of its gross earnings and that the cost of any rolling-stock for the joint working of the system shall be divided between and charged to the capital account of the railways forming the system in proportion to their respective mileages.

* **The figures do not agree with the corresponding figures appearing in Vol. II of the Report for 1931-32 as the figures of capital outlay in History include an adjustment for 1930-31.**

6. BENGAL PROVINCIAL RAILWAY SYSTEM—*concld.*

(*b*) Dasghara-Jamalpurgunj railway (2′ 6″ gauge)—*concld.*

Main provisions of contract—*concld.*

(iv) *Distribution of profits.*—If the net receipts shall exceed the minimum amount sufficient to pay interest on the paid up share capital at the rate of 5 per cent. per annum such excess shall be divided equally, and one moiety shall be paid to the Company; and of the second moiety in proportion, as specified in (*ii*) above shall belong to the Secretary of State and the balance shall be paid to the Company.

If the net receipts do not amount to a sum sufficient to pay interest at the rate of 5 per cent. per annum the whole of such net receipts shall belong to the Company.

(v) *Rates and fares.*—The rates and fares for the carriage of goods and coaching traffic shall be such as may from time to time be sanctioned by the Secretary of State, and the classification of goods thereon shall be in conformity with that from time to time in force on State railways of a similar gauge, provided that in making charges to the public within the sanctioned maxima and minima, the Company shall not calculate the same otherwise than in accordance with the rates authorised and shall make no rebate or other concession which will have the effect of bringing any rate actually paid below the minima authorised.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—	All services in connection with the Post Office, Army, Police and other Departments of Government shall be performed in the same manner and subject to the same regulations and conditions as to rates and otherwise as are for the time being in force on State railways for similar gauge.
(*b*) Government bullion and coin, and the persons in charge thereof.—	

(vii) *Power of the Government to determine contract.*—The Government may, by giving 12 months' previous 'notice of purchase,' determine the contract either on the 31st March 1948, or on the 31st March in the last year of any subsequent period of 10 years.

The Government may also, by giving 'notice of special purchase,' determine the contract at any time in the following cases :—

(*a*) when it is considered desirable to alter the gauge of the railway;

(*b*) when it is considered desirable to convert the railway into a line of through communication; and

(*c*) when it is considered desirable to extend the railway and the Company does not provide funds for such extension.

If the contract be determined by 'notice of purchase' the Secretary of State shall pay to the Company 25 times the amount of the average of the yearly net earnings during the last preceding 3 years, provided that the total amount so payable shall not in any case exceed by more than 20 per cent., or be less than, the total capital expenditure of the Company.

If the contract be determined by 'notice of special purchase,' the Secretary of State shall pay to the Company 25 times the average of the yearly net earnings during the last preceding 3 years or 115 per cent. of the total capital expenditure, whichever may be the greater.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of contract* [*if not determined under* (vi)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Guaranteed interest recoverables from Government.	Total income (column 5+ column 7).	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1917-18 .	8·31	2,46,025	5,003	2,034	0·83	1,991	4,025	1·63	20	59.24
1918-19 .	8·31	2,56,695	15,820	7,445	2·90	2,096	9,541	3·72	36	52.94
1919-20 .	8.31	2,60,701	16,067	7,582	2·91	2,017	9,599	3·68	37	52.85
1920-21 .	8·31	3,04,980	17,516	7,158	2·35	1,069	8,227	2·70	40	59.18
1921-22 .	8·31	3,27,224	19,054	3,208	0·98	937	4,145	1·27	47	83·32
1922-23 .	8·31	3 35,814	18,478	3,812	1·14	916	4,728	1·42	43	79·11
1923-24 .	8·31	3,33,934	21,225	7,575	2·27	734	8,309	2·49	49	64·36
1924-25 .	8·31	3,33.812	21,728	8,378	2·50	738	9,116	2·73	50	61·44
1925-26 .	8·31	3,33,778	22,523	10,570	3·17	490	11,060	3·31	52	53·07
1926-27 .	8·31	3,38,990	22,779	9,823	2·89	627	10,450	3·08	54	56·87
1927-28 .	8·31	3,38,990	24,368	10,235	3·01	*Nil*	10,235	3·01	56	58·00
1928-29 .	8·31	3,38,975	20,174	7,008	2·06	1,939	8,947	2·64	47	65·26
1929-30 .	8·31	3,37,461	22,295	6,522	1·93	542	7,064	2·93	52	70 75
1930-31 .	8·31	3,37,461	20,139	6,832	2·02	1,621	8,453	2·54	47	66·07
1931-32 .	8·31	3,37,461	16,950	5,953	1·87	3,551	9,504	2·81	39	62·39
1932-33 .	8·31	3,37,461	14,615	3,549	1·15	4,719	8,268	2 45	34	73·42
1933-34 .	8·31	3,37,461	14,098	2,585	0·78	4,977	7,562	2·26	32	81·64
1934-35 .	8·31	3,37,461	13,323	2,624	0·78	5,365	7,989	2·37	29	80·30
1935-36 .	8·31	3,37,461	10,090	403	0·01	6,981	7,384	2·19	23	96·00
1936-37 .	8·31	3,37,461	9,060	—854	..	7,492	6,638	1·97	21	..
1937-38 .	8·31	3,37,450	10,690	510	0·15	6,680	7,190	2·13	25	95·29
1938-39 .	8·31	3,37,370	10,480	—60	—0·02	6,780	6,720	2·00	24	100·54

BOMBAY PORT TRUST RAILWAY (5′ 6″ gauge)

The Railway serves all the Docks of the Port of Bombay and also the Bunders on the east of the Island north of the Ballard Pier, as well as various depots allotted to certain trades. It is intended primarily for goods traffic, but also conveys troop trains and postal and passenger trains run in connection with the mail steamers.

It consists of a double line track for its whole length, as well as of reception and sorting yards, eleven stations, and a large number of private sidings and numerous sidings in the docks.

Sanction to the construction of this line by the Bombay Port Trust was conveyed in Railway Board's Notification No. 152, dated the 28th May 1913.

Progress in opening—

Sections of Railway.	Date of opening.	Miles.	Total.
1	2	3	4
Wadala Junction to Victoria Overbridge	1-1-15	7·69	
Victoria Overbridge to Docks	1-2-15	5·94	
TOTAL .	..	..	13·63
Total length of sidings	..	104·32	104·32
Total .	..	..	117·95

Details of construction—

Permanent-way.—The tracks are laid throughout with 75 lb. flat-footed steel rails with the exception of 3·88 miles which are laid with 90 R. lbs. flat-footed rails and 3.32 miles laid with 90 lbs. old section flat-footed rails. Timber sleepers have been used, principally sal, except for 17·52 miles of track which are laid with pea-pod steel sleepers..

Ballast.—As the greater part of the Railway was laid on newly reclaimed ground, moorum ballast was used extensively for packing and boxing, but now that the ground has become consolidated blue stone ballast is used throughout the main lines.

Fencing.—The line is fenced where necessary

Curves.—The radius of the sharpest curve is 400 feet.

Gradients.—The steepest gradient on the line is 1 in 277, near the Nawab Tank Bridge.

Contract—
Main provisions of Contract } —*Nil.* The line is owned and worked by the Bombay Port Trust.

Statistics of working—Not available.

7. BUKHTIARPUR-BIHAR LIGHT RAILWAY (2' 6" gauge).

Managing Agents.—MESSRS. MARTIN & Co., CALCUTTA.

Date of registration of the Company.—19th July 1901.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Bukhtiarpur on the East Indian railway to Bihar	1-7-03	18·50	
Bihar to Silac	17-7-09	9·50	
Siloo to Rajgir	1-11-11	5·00	
TOTAL	..	..	33·00

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on sâl sleepers, except for 4 miles, between Silao and Rajgir, which are laid with 25-lb. flat-footed rails on sâl sleepers. In the last 4 miles extra sleepers have been used.

Ballast.—The ballast consists of broken stone, except in the first few miles where a portion of the packing has been done with broken brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 260 feet

Gradients.—The grades are easy, except at bridge approaches and up through the villages of Chero and Rajgir where the grade is 1 in 100.

Agreements and Local Government orders—

Agreement, dated the 21st August 1899, *between th District Board of Patna and Messrs. Martin and Company of Calcutta, the Promoters, on behalf of the Bukhtiarpur-Bihar Light Railway Company*;	as to the construction, maintenance and working of the Bukhtiarpur-Bihar Light railway.
The Bukhtiarpur-Bihar Tramway Company order published under the *Bengal Government, Railway Department, Notification No. 100-R., dated the 25th June 1901*;	
Agreement, dated the 16th August 1901, *between Messrs. Martin and Company of Calcutta and the Bukhtiarpur-Bihar Light Railway Company*;	
Agreement, dated the 17th February 1904, *between the District Board of Patna and the Bukhtiarpur, Bihar Light Railway Company*, as to the use of land for a siding at Bihar.	
Agreement, dated the 2nd June 1908 (supplemental to the agreements of 1899 and 1901), *between the District Board of Patna and the Bukhtiarpur-Bihar Light Railway Company*;	as to the construction, maintenance and working of the extension of the Bukhtiarpur-Bihar Light railway from Bihar to Silao.
The Bukhtiarpur-Bihar Extension order published under the *Bengal Government, Railway Department Notification No. 11-R., dated the 15th June 1908*;	
The Bukhtiarpur-Bihar-Rajgir Extension order published under the *Bengal Government, Railway Department, Notification No. 20-R., dated the 14th November 1911*;	as to the construction, maintenance and working of the extension of the Bukhtiarpur-Bihar Light Railway from Silao to Rajgir.
Agreement, dated the 28th November 1911 (supplemental to the agreements of 1899, 1901 and 1908), *between the District Board of Patna and the Bukhtiarpur-Bihar Light Railway Company*;	

Main provisions of agreements and Local Government orders—

(i) *Land.*—The District Board of Patna grant to the Bukhtiarpur-Bihar Light Railway Company in perpetuity, subject to their right of purchasing the line [as in (vi) below], the free use of so much of the side portion of the District Board road between Bukhtiarpur and Rajgir as is necessary, but not exceeding a width of eight feet, for the purpose of the railway; and promote the acquisition of any additional land required outside the boundary of the said road at the cost of the Company.

(ii) *Aid by the Local Authority.*—The District Board of Patna will recommend and apply to the Local Government either to exempt the Bukhtiarpur-Bihar Light Railway Company from the tax on account of road cess or to exact only a nominal tax for a period of twenty-one years from the date when the line is opened for traffic, with power of renewal. The Board also guarantee to supplement the net earnings of the Company by such annual subsidy as may be necessary to allow of the Company paying a dividend of 4 per cent. per annum on their share capital, provided that the total liability of the Board on this account in any one year shall not exceed Rs. 32,000 or the sum of 4 per cent. on the Company's share capital.

7. BUKHTIARPUR-BIHAR LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Main provisions of agreements and Local Government orders—*concld.*

(iii) *Distribution of profits.*—Any surplus profits in excess of 4 per cent., after setting aside such sums as the Directors may decide, on the capital for the time being of the Railway Company, are to be equally divided between the District Board of Patna and the Company.

(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } *Nil.*

(vi) *Power of the Local Authority to determine agreement.*—Upon the expiration of 21 years, from the date of the Local Government order authorising the construction of the line, or at the end of every seven years thereafter, the District Board of Patna have, by giving six months' previous notice, the right of purchasing the line by paying to the Company the value calculated at twenty years' purchase of the average net annual profits of the Company during the four years preceding the transaction together with a bonus of 20 per cent. thereon.

N.B.—The Local Authority did not exercise their right of purchasing the line in 1922.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement.*—None specified.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Amount credited to Renewal Reserve Account.	Subsidy from (+), or share of net profits to (—), the District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs	Rs.		Rs.	Rs.	Rs		Rs.	
1913-14 .	33·00	13,11,472	1,58,559	46,537	3·54	8,000	+18,802	57,339	4·37	92	70·65
1914-15 .	33·00	13,59,590	1,65,932	60,280	4·43	4,500	—1,259	54,521	4·01	97	63·67
1915-16 .	33·00	13,59,656	2,31,282	1,09,188	8·03	32,000	—9,306	67,882	4·99	135	52·79
1916-17 .	33·00	13,59,598	1,56,949	62,192	4·57	5,000	—1,888	55,304	4·06	91	60·37
1917-18 .	33·00	13,83,955	1,96,825	84,388	6·09	15,000	—7,373	62,015	4·48	115	57·12
1918-19 .	33·00	13,92,455	1,59,610	62,090	4·45	4 500	—1,980	55,610	3·99	93	61·09
1919-20 .	33·00	14,20,178	1,78,674	47,755	3·36	*Nil*	+5,673	53,428	3·76	104	73·27
1920-21 .	33·00	14,19,544	3,53,246	2,03,869	14·36	40,000	—46,585	1,17,284	8·26	205	42·28
1921-22 .	33·00	14,19,628	2,59,279	1,12,010	7·89	17,500	—17,658	76,852	5·41	151	56·79
1922-23 .	33·00	14,41,303	2,71,625	98,225	3·81	15,000	—12,215	71,010	4·92	158	63·83
1923-24 .	33·00	14,31,232	3,82,200	1.74,324	12·17	65,000	—23,290	86,034	6·01	222	54·38
1924-25 .	33·00	14,60,821	3,08,974	1,40,101	9·59	50,000	—14,240	75,861	5·19	180	54·65
1925-26 .	33·00	14,67,119	3,61,328	1,75,565	11·96	45,000	—33,293	97,272	6·63	210	51·41
1926-27 .	33·00	14,78,347	4,31,918	2,62,935	10·77	85,000	—50,256	1,27,679	8·63	251	39·12
1927-28 .	33·00	14,83,361	3,86,802	1,58,479	10·68	50,000	—37,306	1,21,173	8·17	225	59·02
1928-29 .	33·00	15,10,164	3,89,955	1,40,948	9·33	50,000	—29,546	1,11,402	7·38	227	63·85
1929-30 .	33·00	15,05,063	3,39,241	1,09,263	7·26	60,000	—19,432	89,831	5·97	198	67·79
1930-31 .	33·00	15,11,190	3,31,385	96,652	6·40	40,000	—13,327	83,325	5·51	193	70·32
1931-32 .	33·00	15,25,659	4,04,596	1,06,753	7·00	90,000	—9,834	6,919	0·45	236	73·62
1932-33 .	33·00	15,25,853	3,07,766	1,01,826	6·67	45,000	—2,636	54,190	3·55	179	66·91
1933-34 .	33·00	15,19,837	2,08,014	35,431	2·30	15,000	+30,265	65,696	4·32	121	82·94
1934-35 .	33·00	15,12,666	3,03,941	1,15,345	7·60	20,000	*Nil*	1,15,345	7·60	177	61·90
1935-36 .	33·00	15,31,018	2,57,095	69,753	4·55	32,300	—2,739	67,014	4·37	150	72·80
1936-37 .	33·00	15,40,985	2,82,128	65,921	4·20	34,236	—472	65,449	4·24	164	76·60
1937-38 .	33·00	15,52,866	2,41,068	38,849	2·50	38,909	+14,701	53,550	3·44	140	83·87
1938-39 .	33·00	15,58,756	2,49,679	56,270	3·61	37,271	+66,684	62,954	4·03	146	77·45

8. BURDWAN-KATWA RAILWAY (2′ 6″ gauge).

Managing Agents.—MESSRS. MCLEOD & CO., CALCUTTA.

Date of registration of the Company.—1913.

Construction of this line by the Burdwan-Katwa Railway Company was authorised in Railway Board's telegram No. 3711-R.C., dated the 30th December 1913.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Burdwan to Katwa	1-12-15	32·47	32·47

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed rails laid on sâl sleepers.

Ballast.—The line is ballasted with moorum, except in station yards and on open top bridge approaches where stone or brick ballast has been used.

Fencing.—The line is not fenced.

Curves.—The sharpest curve has a radius of 250 feet at Shrikhanda station.

Gradients.—The ruling gradient is 1 in 200.

Contract—

Dated the 5th April 1917, *between the Secretary of State and the Burdwan-Katwa Railway Company, Limited,* as to the construction, maintenance and working of the line.

Main provisions of contract—

(i) *Land.*—Provided by Government free of cost to the Company.

(ii) *Government aid.* (iii) *Distribution of profits.*— When the net receipts shall not be sufficient to pay interest at the rate of 3½ per cent. per annum on the paid-up share capital, the Secretary of State shall pay the Company a sum which together with the net receipts will make up an amount equal to 3½ per cent. When the net receipts for any year do not exceed 5 per cent per annum on the paid-up share capital the whole of such net receipts shall belong to the Company. When the net receipts in any year exceed 5 per cent. on the paid-up share capital such excess shall be divided equally between the Secretary of State and the Company.

(iv) *Rates and fares.*—Rates and fares shall be such as may from time to time be sanctioned by the Secretary of State and the classification of goods shall be in conformity with that from time to time in force on State Railways of a similar gauge.

(v) *Special obligations as to the conveyance of mails, troops, police, etc.*—To be conveyed in the same manner and subject to the same regulations and conditions as are in force on State Railways of similar gauge.

(vi) *Power of Government to determine contract.*—The Secretary of State may at any time, by giving six months' notice, assume the working of the railway by State or any other agency, if the Company are guilty of any breach of contract, or gross mismanagement, or if the working expenses have exceeded the gross earnings for three consecutive years.

The Secretary of State may, by giving 12 months' previous "Notice of purchase," determine the contract either on the 31st March 1946 or on the 31st March in the last year of any subsequent period of ten years, paying to the Company a sum of money equal to 25 times the amount of the average of the yearly net earnings during the 3 years immediately preceding, but the amount so payable shall not exceed by more than 20 per cent. the total capital expenditure or be less tha nsuch capital expenditure.

The Secretary of State may also, by giving 12 months' previous "Notice of special purchase," determine the contract at any time in the following cases :—

(*a*) When it is considered desirable that the gauge of the Railway should be altered.

(*b*) When it is desired to convert the Railway into a line of through communication.

(*c*) When it is desired to extend the Railway and the Company does not, within six months from date of formal requisition, raise such additional capital.

If the contract is determined by "Notice of special purchase" the Secretary of State shall pay the Company 25 times the average of yearly net earnings during the 3 years immediately preceding or 115 per cent. of the total capital expenditure whichever may be greater.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* —Shall remain in force until determined under (vi) above.

8. BURDWAN-KATWA RAILWAY (2′ 6″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Guaranteed interest recoverable from (+) or moiety of profits payable to (—) Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1915-16 .	32·52	17,26,605	38,464	18,625	1·08	..	..	..	23	51·57
1916-17 .	32·52	17,81,915	1,33,399	8,570	0·48	+54,229	62,799	3·52	78	93·57
1917-18 .	32·52	17,98,301	1,32,146	32,104	1·79	+29,688	61,792	3·44	78	75·70
1918-19 .	32·52	18,08,582	1,41,455	33,814	1·87	+28,486	62,300	3·44	83	76·10
1919-20 .	32·47	18,12,488	1,70,823	67,538	3·73	..	67,538	3·73	101	60·46
1920-21 .	32·47	18,17,502	1,37,010	38,017	2·08	+24,093	62,110	3·40	99	77·23
1921-22 .	32·47	18,27,184	1,74,917	33,279	1·82	+29,238	62,517	3·42	104	80·97
1922-23 .	32·47	18,31,350	1,96,088	36,497	1·99	+25,996	62,493	3·41	116	81·39
1923-24 .	32·47	18,30,650	2,05,620	79,598	4·35	..	79,598	4·35	122	61·29
1924-25 .	32·47	18,46,003	2,11,579	76,994	4·17	..	76,994	4·17	125	63·61
1925-26 .	32·47	18,59,230	2,33,742	92,173	4·96	—859	91,314	4·91	138	60·57
1926 27 .	32·47	18,73,409	2,14,099	68,111	3·64	..	68,111	3·64	127	68·19
1927-28 .	32·47	19,46,584	2,10,943	50,545	2·59	+19,195	69,740	3·58	125	76·04
1928-29 .	32·47	19,87,909	1,76,741	16,708	0·84	+56,359	73,067	3·68	105	90 55
1929-30 .	32·47	20,19,348	2,06,913	42,382	2·10	+31,687	74,069	3·67	123	79·52
1930-31 .	32·47	20,34,326	1,93,937	19,051	0·94	+55,250	74,301	3·65	115	90·18
1931-32 .	32·47	20,47,677	1,78,391	32,175	1·57	+44,011	76,186	3·72	106	81·96
1932-33 .	32·47	20,43,657	1,72,552	44,261	2·17	+30,934	75,195	3·68	102	74·35
1933-34 .	32·47	20,40,381	1,60,525	31,050	1·52	+44,333	75,383	3·69	95	80·66
1934-35 .	32·47	20,33,168	1,42,293	25,373	1·25	+53,481	78,854	3·88	84	82·17
1935-36 .	32·47	20,40,485	1,12,556	74	..	+80,901	80,975	3·97	67	99·93
1936-37 .	32·47	20,41,792	1,11,985	—4,839	—0·24	+85,955	81,116	3·97	66	104·32
1937-38 .	32·47	20,53,862	1,28,341	8,604	0·42	+67,843	76,447	3·72	76	93·30
1938-39 .	32·47	20,68,048	1,28,985	400	0·02	+73,012	73,412	3·55	76	99·69

CALCUTTA PORT COMMISSIONERS' RAILWAY (5' 6" gauge).

The railway at the present date provides the terminal for the East Indian, the Eastern Bengal and Bengal Nagpur Railways for goods traffic to and from the Port of Calcutta, and also deals with local goods traffic within the Port between warehouses, sheds and the steamer berths on the river front and at the Kidderpore Docks and the King George's Dock.

The East Indian Railway connects with the system at East Dock Junction (*via* the E. B. Railway) and at Telkul Ghat on the Howrah side of the River, the Eastern Bengal Railway at Bracebridge Station and Chitpur, and the Bengal Nagpur Railway at West Dock Junction and at Shalimar junction on the Howrah side.

Progress in opening.

Main Line—	*Date of opening.*	*Miles.*
Bagh Bazar to Meerbohur Ghat	11-1-75	1·76
Cossipore (Gun Foundry Road) to Bagh Bazar (Chitpur)	1-6-78	1·14
Meerbohur Ghat to Jetties	1-6-78	0·84
Jetties to Chandpal Ghat	1-12-80	0·32
Chandpal Ghat to Kidderpore Dock (Graving Dock)	1-1-87	2·16
Graving Dock *via* Kidderpore Dock to Majerhat (East Dock Junction)	0-0-93	2·34
East Dock Junction to West Dock Junction (B. N. Railway Junction)	0-0-01	1·35
East Dock Junction to Garden Reach Berths	2-7-16	2·65
Telkul Ghat (E. I. Railway) to Shalimar (B. N. Railway)	31-12-01	2·20
Branches—		
East Dock Junction to Chetla	0-0-93	1·50
Subsidiary Marshalling Yard to King George's Dock	0-0-28	1·25
Total	..	17·51 miles.
Total track in main lines, marshalling yards, sidings, etc.		182·51 miles.

Details of Construction.

(*i*) *Permanent-way.*—

(*a*) *Calcutta Side.*—The Cossipore Chandpal Ghat Section is entirely laid with steel rails weighing 75 lbs. and 60 lbs. to the yard on wooden sleepers except for a section of 5,586 ft. of track which is laid with D. H. rails on wooden sleepers, and another 640 ft. of track which is laid with D. H. rails on Denham and Olpherts steel sleepers. All packing is done with brick ballast.

(*b*) *Kidderpore Dock Section.*—The total mileage of track on the Kidderpore Dock Section is 90·09 miles.

The main lines from the Graving Dock to Chetla are laid with 75 lbs. flat footed and D. H. steel rails with cast iron chairs, and 90 lbs. flat footed steel rails on wooden sleepers. The main lines from No. 1 Swing Bridge to Majerhat are laid with 75 lbs. steel rails, both flat footed and double headed with cast iron chairs on wooden sleepers. This section includes most of the track from Dock Junction to the B. N. Railway junction.

The portion of the track from Shapore to Garden Reach Jetties in this section is laid with 75 lbs. flat footed steel rails on wooden sleepers.

In the yards there are 60 lbs. 75 lbs., and 90 lbs. per yard steel rails. Some of the 60 lbs. and 75 lbs. rails are double headed with cast iron chairs. There are also steel sleepers and wooden sleepers with cast iron bearing plates in the yards. Practically the whole of the lines is packed with brick ballast.

(*c*) *King George's Dock and Garden Reach Sections.*—The permanent-way in the King George's Dock and Garden Reach Section comprising 22·32 miles of track is laid with 75 lbs. and 90 lbs. flanged rails on wooden sleepers. The packing is done with brick ballast.

(*d*) *Shalimar Section.*—The Shalimar Branch is laid with 75 lbs. double headed steel rails on cast iron chairs and flanged rails spiked on sal sleepers. A section of 2,430 ft. of the main line has been laid with 90 lbs. F. F. rails and six sets of 90 lbs F. F. rail points and crossings.

(*ii*) *Fencing.*—Except for the King George's Dock and Garden Reach Section, and between Dhana Ghat and Gun Foundry on the Cossipore Chandpal Ghat Section the railway lines are fenced throughout

CALCUTTA PORT COMMISSIONERS' RAILWAY (5′ 6″ gauge)—*concld.*

Details of construction—*concld.*

(*iii*) *Curves.*—The radius of the sharpest curve is 250 ft. but the minimum radius in New Yards is now being taken as 547 ft.

(*iv*) *Gradients.*—The ruling gradient on the greater part of the railway is 1 in 300, except where the line passes under the Howrah Bridge approach, where the gradient is 1 in 80 and between Hastings Bridge and Watgunge where the gradient is 1 in 190.

(*v*) *Contract.—Nil.* The line was constructed by the Port Commissioners out of Port Trust Funds and is maintained and worked by them. The land on the left bank of the Hooghly between Chandpal Ghat and Ahiritolla Ghat was conveyed to the Commissioners at a quit rent of Rs. 37,292 per annum. The land north of Ahiritolla was acquired by the Commissioners under the Land Acquisition Act. The Commissioners have only a right of user in the land between Chandpal Ghat and Hastings for the purposes of the tramway.

The land on the right bank of Hooghly between Telkulghat Road and Sheebpur Ghat Road was acquired by the Commissioners under the Land Acquisition Act and that between Sheebpur Ghat and the Bengal Nagpur Railway Yard was conveyed to the Commissioners at a quit rent of Rs. 3,090-10-4.

(*vi*) *Statistics of working.*—Not available.

9. CUTCH STATE RAILWAY (2′ 6″ gauge).

This line was sanctioned for construction at the cost of His Highness the Maharaja Maha Rao Sahib of Cutch under the Government of India, Public Works Department, Notification No. 329, dated the 4th September 1903, and the Railway Board's Notification No. 86, dated the 1st June 1905, and is maintained and worked by the Cutch Durbar.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	GRAND TOTAL.
1	2	3	4	5
Tuna to Anjar	1-5-05	11·67		
Anjar to Bhuj	1-11-08	25·11	36·78	
Anjar to Warsamedi	5-1-29	3·73		
Warsamedi to Kandla	16-11-27*	11·64	15·37	*This was not brought into use for Passenger traffic till 5-1-29.
Warsamedi to Bhachau	14-4-31	19·85	19·85	
TOTAL OPEN MILEAGE	..	..	..	72·00

Details of construction—

Permanent-way.—The permanent way consists of 30-lb. flat-footed steel rails on Tuna-Bhuj and 41¼ on Anjar-Kandla lines on half-round teak sleepers.

Ballast.—The line is ballasted with stone and hard moorum.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 359 feet radius.

Gradients.—The ruling gradient is 1 in 200 between Tuna and Anjar, 1 in 100 between Anjar and Bhuj and 1 in 150 on Anjar to Kandla line.

Contract—

Nil.—The line is owned and worked by the Cutch Durbar.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	36·78	10,52,405	97,786	33,455	3·17	51	65·78
1914-15	36·78	10,78,861	96,976	39,054	3·62	51	59·72
1915-16	36·78	10,92,726	1,05,271	52,745	4·82	55	49·89
1916-17	36·78	11,31,409	92,983	35,526	3·14	49	61·79
1917-18	36·78	11,43,615	58,800	9,471	0·82	31	83·89
1918-19	36·78	11,44,318	1,19,350	55,099	4·81	62	53·83
1919-20	36·78	11,46,862	1,02,678	69,661	6·07	54	32·15
1920-21	36·78	11,57,181	93,323	41,769	3·61	49	55·24
1921-22	36·78	11,60,886	86,096	24,672	2·12	45	71·34
1922-23	36·78	11,95,669	98,646	36,297	3·04	52	63·20
1923-24	36·78	12,04,479	1,14,601	42,866	3·55	60	62·59
1924-25	36·78	12,04,479	1,04,597	20,480	1·70	55	80·42
1925-26	36·78	12,04,937	79,000	19,100	1·58	41	75·82
1926-27	36·78	12,04,937	77,090	19,120	1·59	40	75·19
1927-28	36·78	14,47,903	89,991	35,013	2·42	47	61·09
1928-29	52·15	14,33,203	1,27,900	68,400	4·77	47	46·52
1929-30	52·15	16,45,200	1,36,800	68,500	4·17	50	49·91
1930-31	52·15	18,17,402	1,20,741	55,789	3·07	44	53·79
1931-32	72·00	18,89,956	1,41,450	58,050	3·07	38	58·96
1932-33	72·00	19,32,616	1,89,100	82,200	4·26	51	56·39
1933-34	72·00	19,53,355	1,67,570	59,542	3·04	45	64·46
1934-35	72·00	20,72,669	2,01,102	72,200	3·48	54	64·09
1935-36	72·00	23,33,985	2,22,581	86,441	3·70	59	61·16
1936-37	72·00	23,67,348	2,50,072	1,03,779	4·38	67	58·50
1937-38	72·00	23,80,800	2,55,120	93,250	3·91	68	63·44
1938-39	72·00	23,93,800	2,78,575	86,575	3·61	74	68·94

10. DEHRI ROHTAS LIGHT RAILWAY (2′ 6″ gauge).

Managing Agents.—MESSRS. OCTAVIUS STEEL & CO., LTD., CALCUTTA.

Date of registration of the Company.—17th March 1909.

Progress in opening—

Section of railway. 1	Date of opening. 2	Miles. 3	Total. 4
Dehri-on-Sone to Rohtas	6-2-11	23·83	
Rohtas to Rohtas Fort	1-12-27	1·68	
TOTAL	..	..	25·51

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. and 45 lb. steel rails on sâl sleepers.

Ballast.—The whole line is ballasted.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 477 feet radius.

Gradients.—The ruling gradient is 1 in 200, uncompensated.

Agreement and Local Government order—

Agreement, dated the 13th October 1907, *between the District Board of Shahabad and Messrs. Octavius Steel and Company of Calcutta (called "the Promoters") for and on behalf of the Dehri-Rohtas Tramway Company, scheduled to the order quoted below*;

The Dehri-Rohtas Tramway Company order published under the Bengal Government, Railway Department, Notification No. 24-R., dated the 10th November 1908;

} as to the construction, maintenance and working of the line from Dehri-on-Sone to Rohtas.

Main provisions of agreement and Local Government order—

(i) *Land.*—The line runs partly on Government land in charge of the Public Works Department and partly along the district road to Akbarpur. The District Board of Shahabad have granted to the Dehri-Rohtas Tramway Company in perpetuity, subject to their right of purchasing the line [as in (vi) below], the free use of so much of the side of the District Board road between Dehri and Rohtas as is necessary, but not exceeding a width of eight feet leaving a clear roadway of fourteen feet intact for ordinary wheeled traffic, for the purpose of the line, and have promoted the acquisition of any additional land required outside the boundary of the said road at the cost of the Company.

(ii) *Aid by the Local Authority.*—The District Board of Shahabad will recommend and apply to the Local Government to exempt the Dehri-Rohtas Tramway Company from the tax on account of road cess, or to exact only a nominal tax, for a period of twenty-one years from the date when the line is opened for traffic, with power of renewal.

(iii) *Distribution of profits.*—The profits go to the Company.

(vi) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods and the East Indian railway classification of goods, have been fixed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—

(*b*) Government bullion and coin, and the persons in charge thereof.—

} *Nil.*

(iv) *Power of the Local Authority to determine agreement.*—Upon the expiration of 21 years, from the date of the Local Government order authorising the construction of the line, or at the end of every seven years thereafter, the District Board of Shahabad have, by giving six months' previous notice the right of purchasing the line by paying to the Company the value calculated at twenty years, purchase of the average net annual profits of the Company during the four years preceding the transaction together with a bonus of 20 per cent. thereon.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement* [*if not determined under* (iv)].—None specified.

10. DEHRI ROHTAS LIGHT RAILWAY (2' 6" gauge)—*concld.*

Statistics of working (Those for the periods prior to 1913-14 will be found in Appendix I to the Railway administration Report for 1913-14.)

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	23·83	6,15,474	1,49,861	93,912	15·25	120	37·33
1914-15	23·83	6,26,528	1,90,728	1,30,900	20·89	152	31·35
1915-16	23·83	6,27,568	2,19,432	1,48,953	23·73	176	32·11
1916-17	23·83	6,88,158	2,31,709	1,58,246	22·99	187	31·70
1917-18	23·83	6,70,323	2,18,395	1,39,039	20·74	176	36·26
1918-19	23·83	7,39,877	2,23,787	86,894	11·74	179	61·17
1919-20	23·83	7,85,980	2,66,120	1,16,158	14·77	213	56·35
1920-21	23·83	8,68,789	2,78,341	1,23,043	14·16	223	55·79
1921-22	23·83	8,80,602	2,51,825	97,537	11·07	201	61·26
1922-23	23·83	8,86,137	3,16,925	1,38,127	15·58	253	56·41
1923-24	23·83	9,23,384	3,19,469	1,44,115	15·60	256	54·89
1924-25	23·83	10,17,154	3,10,354	1,19,297	11·72	248	61·56
1925-26	23·83	11,24,217	3,21,657	1,48,683	13·23	259	53·78
1926-27	23·83	11,92,592	3,27,593	1,51,161	12·68	264	53·85
1927-28	25·51	12,30,418	3,27,779	1,60,813	12·17	267	50·93
1928-29	25·51	12,73,010	2,96,251	1,41,581	11·22	223	52·21
1929-30	25·51	12,63,753	2,94,539	1,41,976	11·23	222	51·79
1930-31	25·51	12,64,191	2,32,680	84,281	6·67	175	63·77
1931-32	25·51	12,56,702	1,87,702	62,929	5·00	142	66·47
1932-33	25·51	12,47,779	1,61,451	49,386	3·96	122	69·41
1933-34	25·51	12,47,945	1,69,662	66,523	5·33	127	60·79
1934-35	25·51	12,49,949	2,31,822	1,02,955	8·24	175	55·59
1935-36	25·51	12,48,447	1,88,856	63,454	5·08	142	66·40
1936-37	25·51	12,45,541	1,64,629	23,669	1·90	124	85·62
1937-38	25·51	12,62,621	1,74,163	54,317	4·30	131	68·81
1938-39	25·51	12,75,327	2,43,123	86,944	6·82	183	64·23

11. DHOLPUR-STATE RAILWAY (2′ 6″ gauge).

This railway was sanctioned for construction at the cost of His Highness the Maharaj Rana of Dholpur under Railway Board's Notification No. 267, dated the 14th December 1905, and is maintained and worked by the Dholpur Durbar.

Progress in opening—

Sections of railway.	Date of opening	Miles.	Total	Grand Total.
1	2	3	4	5
Dholpur on the Midland section of the Great Indian Peninsula railway to Bari	24-2-08	19·62		
Bari to Baseri	15-9-13	8·81		
Baseri to Tantpur	1-7-14	7·95		
Mohari to Barauli	10-2-17	15·25		
Barauli to Sirmuttra	1-3-29	3·81		
Total	..	..	55·44	
Under construction or sanctioned for construction.				
Dholpur to Rajakhera (sanctioned on 8th August 1918)	..	22·34	22·34	
Grand Total	..	..	..	77·78

Details of construction—

Permanent way.—

Dholpur Tantpur Section is laid with 30 lbs. new steel rail on Indian State Railway pattern Steel trough sleepers; 17 miles of Mohari Sirmuttra section are laid with 41¼ lbs. Second-hand Flat-footed steel rail on sal sleepers and 2 miles with 50 lbs. flat-footed steel rails on sal sleepers.

Ballast.—The line is ballasted throughout with stone.

Fencing.—The line is not fenced.

Curves.—The radius of the sharpest curve is 1,432·5 feet.

Gradients.—The ruling gradient is 1 in 200 throughout except 1 in 100 for a very short length on Mohari-Sirmuttra section.

Contract—

Nil.—The line is owned and worked by the Dholpur Durbar.

The Mohari-Barauli section was constructed by the Imperial Delhi Committee for the carriage of stone for New Delhi and was made over to the Dholpur Durbar for working. Under a revised agreement, dated the 26th January 1927, concluded between the Government of India and the Dholpur Durbar, the Imperial Delhi Committee handed over the line free of cost to the Durbar and ceased to hold any interest in the line except as regards the flat rate at which stone is to be carried for New Delhi. This arrangement is to be in force until the whole project of New Delhi is closed.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 1 to the Railway Administration Report for 1913-14.)

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs. (Includes the Mohari-Barauli railway from 1916-17.)	Rs.	Rs.		Rs.	
1913-14	28·43	10,73,930	54,372	21,722	2·02	36	60·04
1914-15	36·38	12,40,836	71,705	28,006	2·26	38	60·94
1915-16	36·38	12,42,223	87,624	30,249	2·44	46	65·48
1916-17	51·63	*12,41,848	1,06,000	53,767	4·33	40	49·28
1917-18	51·63	*12,92,602	1,11,334	43,911	3·40	42	60·56
1918-19	51·63	*13,00,262	1,17,842	43,944	3·38	44	62·71
1919-20	51·63	*13,39,186	1,59,314	69,893	5·22	59	56·16
1920-21	51 63	*13,81,035	1,84,288	90,826	6·58	39	50·72
1921-22	51·63	*14,93,439	1,75,617	55,015	3·68	65	68·67
1922-23	51·63	*15,29,680	2,35,805	94,258	6·16	88	60·03
1923 24	51·63	*15,35,863	2,29,351	85,454	5·56	85	62·74
1924-25	51·63	*15,36,691	2,40,998	1,07,651	7·00	90	55·33
1925-26	51·63	*15,60,219	2,62,754	1,15,780	7·42	93	55·94
1926-27	51·63	*15,89,347	2,29,751	1,15,843	7·29	86	49·58
1927-28	51·63	*16,33,216	2,20,896	98,465	6·03	82	55·42
1928-29	55·44	*16,71,257	1,87,621	69,281	†4·15	65	63·07
1929-30	55·44	17,13,704	2,19,254	1,08,884	6·35	76	50·34
1930-31	55·44	17,29,902	1,92,301	78,952	†4·56	67	58·94
1931-32	55·44	17,38,942	1,47,912	51,748	†2·98	51	65·01
1932-33	55·44	17,34,835	1,65,484	69,851	4·03	57	57·79
1933-34	55·44	17,31,329	1,61,613	66,723	†3·85	56	58·71
1934-35	55·44	17,31,789	1,75,167	75,252	†4·35	61	57·04
1935-36	55·44	17,40,671	1,75,193	53,635	†3·08	61	69·39
1936-37	55·44	17,45,495	1,57,425	32,241	†1·85	55	79·52
1937-38	55·44	17,49,458	1,80,510	67,375	3·85	63	62·68
1939-40	55·44	17,50,625	1,66,767	71,685	4·09	58	57·01

*Excludes the expenditure incurred by the Imperial Delhi Committee on the Mohari-Barauli section prior to its opening.
†Revised figures.

12. FUTWAH-ISLAMPUR LIGHT RAILWAY (2′ 6″ gauge).

Managing Agents—MESSRS. MARTIN & CO., CALCUTTA.

Date of registration of the Company.—September 1915.

The construction of this line by the Futwah-Islampur Light Railway Company was authorised in Railway Board's telegram No. $\frac{2071\text{-}C.}{3216}$, dated the 24th September 1915.

Progress in opening—

Section of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Futwah to Islampur	24-1-22	27·00	27·00

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on sâl sleepers, except for 4 miles (mile 17½ to 21½) where there are steel trough sleepers.

Ballast.—The line is fully ballasted with stone and brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 409 feet.

Gradients.—The grades are easy except at some bridge approaches where the grade is 1 in 150.

Agreement and contract—

Agreement, dated the 31st July 1912, *between the District Board of Patna and Messrs. Martin and Company on behalf of the Futwah-Islampur Light Railway Company*, as to the grant of a concession to the company of the right to construct a Light railway over that portion of the road between Futwah and Hilsa which is within the jurisdiction of the Board.

Contract, dated the 3rd September 1920, *between the Secretary of State and the Futwah-Islampur Light Railway Company*, as to the construction, maintenance and working of the Futwah-Islampur Light railway.

Main provisions of agreement and contract—

(i) *Land.*—Provided free by Government other than one side of the road between Futwah and Hilsa the free use of which has been granted by the District Board of Patna.

(ii) *Government aid.*—If the net receipts of the Company shall not be sufficient to pay interest on the paid up capital at the rate of 3½ per cent. per annum, the Secretary of State will pay such a sum as shall together with the net receipts make up an amount equal to interest at the rate of 3½ per cent. per annum on the share capital of the Company for the time being paid up.

(iii) *Aid by the Local Authority.*—The District Board of Patna will recommend to the local Government to exempt the Company from the tax on account of road cess or to exact only a nominal tax for 21 years from the date of opening of the line, with power of renewal.

(iv) *Distribution of profits.*—When the net receipts shall exceed the minimum amount sufficient to pay interest on the paid up share capital at the rate of 5 per cent. per annum, half of such excess shall belong to the Secretary of State and the other half be divided equally between the Company and the District Board of Patna.

(v) *Rates and fares.*—Shall be such as may, from time to time, be sanctioned by the Secretary of State and the classification of goods shall be in conformity with that from time to time in force on State railways of a similar gauge, provided that in making charges to the public within the sanctioned maxima and minima the Company shall not calculate the same otherwise than in accordance with the rates authorised and shall make no rebate or other concession which will have the effect of bringing any rate actually paid below the minima authorised.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores—
(*b*) Government bullion and coin and persons in charge thereof—

} All services in connection with the Post Office, Army, Police and other Departments of Government shall be performed in the same manner and subject to the same regulations and conditions as are for the time being in force on State Railways of a similar gauge.

(vii) *Power of the Government to determine contract.*—The Government may, by giving 12 months' previous notice 'of purchase,' determine the contract either on the 31st March 1948, or on the 31st March in the last year of any subsequent period of 10 years.

12. FUTWAH-ISLAMPUR LIGHT RAILWAY (2′ 6″ gauge)—*concld.*

Provisions of agreement and contract—*concld.*

The Government may also, by giving 'notice of special purchase,' determine the contract at any time in the following cases:—

(*a*) When it is considered desirable to alter the gauge of the railway;

(*b*) When it is considered desirable to convert the railway into a line of through communication and

(*c*) When it is considered desirable to extend the railway and the Company does not provide funds for such extension.

If the contract be determined by 'notice of purchase' the Secretary of State shall pay to the Company 25 times the amount of the average of the yearly net earnings, during the last preceding 3 years provided that the total amount so payable shall not in any case exceed by more than 20 per cent., or be less than, the total capital expenditure of the Company.

If the contract be determined by 'notice of special purchase' the Secretary of State shall pay to the Company 25 times the average of the yearly net earnings during the last preceding 3 years or 115 per cent. of the total capital expenditure whichever may be the greater. But if such purchase shall occur within less than 3 years from the opening of the extension referred to in (*c*) the price shall be 115 per cent. of the total capital expenditure.

(viii) *Power of the Company to surrender contract.*—Nil.

(ix) *Term of Contract* [*if not determined under* (vii)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from (+) or share of surplus profit to (—) the Government.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1921-22 . .	27·00	16,13,466	18,037	4,916	0·30	..	4,916	0·30	67	72·74
1922-23 . .	27·00	17,40,431	1,16,715	32,657	1·88	39,322	71,979	4·13	83	72·06
1923-24 . .	27·00	17,96,320	1,40,392	63,516	3·53	14,370	77,886	4·33	100	54·75
1924-25 . .	27·00	18,52,573	1,72,503	98,389	5·31	—88	98,301	5·30	123	42·96
1925-26 . .	27·00	18,90,562	1,89,246	1,06,914	5·65	—3,330	1,03,584	5·47	134	43·50
1926-27 . .	27·00	19,21,364	1,86,875	97,735	5·08	..	97,735	5·08	133	47 71
1927-28 . .	27·00	19,46,137	1,76,657	84,310	4·33	..	84,310	4·33	125	52·27
1928-29 . .	27·00	19,47,853	1,28,939	32,299	1·66	53,525	85,824	4·41	92	74·95
1929-30 . .	27·00	19,55,972	1,56,736	60,314	3·08	25,793	86,107	4·40	111	61·52
1930-31 . .	27·00	19,51,288	1,59,525	46,007	2·36	40,206	86,213	4·41	113	71·16
1931-32 . .	27·00	19,46,230	1,35,791	29,244	2·80	57,672	86,916	4·47	97	78·46
1932-33 . .	27·00	19,49,255	1,12,507	26,075	1·34	61,507	87,582	4·49	80	76·82
1933-34 . .	27·00	19,47,937	1,17,688	29,031	1·49	54,338	83,369	4·28	84	75·34
1934-35 . .	27·00	19,43,615	1,23,494	30,747	1·60	48,663	79,410	4·08	88	75·10
1935-36 . .	27·00	19,50,945	1,09,037	10,043	0·51	69,050	79,093	4·05	78	90·80
1936-37 .	27·00	19,60,279	89,663	—15,495	—0·77	+96,782	81,287	4·14	64	117·30
1937-38 . .	27·00	19,62,529	1,12,202	3,048	0·15	+77,882	80,930	4·12	80	97·32
1938-39 . .	27·00	19,67,080	1,21,104	24,815	1·26	+55,400	80,215	4·07	86	79·52

13. GWALIOR LIGHT RAILWAY (2′ 0″ gauge).*

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand Total
1	2	3	4	5
Gwalior-Shivpuri section—				
Gwalior to Shivpuri	2-12-99	74·45	74·45	
Gwalior-Bhind section—				
Gwalior to Bhind	2-12-99	51·93	51·93	
Gwalior-Sheopur-Kalan section—				
Gwalior to Jora Alapur	1-1-04	29·44		
Jora Alapur to Sabalgarh	1-12-04	26·05		
Sabalgarh to Birpur	1-11-08	19·55		
Birpur to Sheopur Kalan	15-6-09	46·88	121·92	
SUBURBAN LINES.				
Morar Cantt. extension	1-11-24	1·65	1·65	
Gwalior to Kampoo	29-11-25	3·25	3·25	
Ujjain Agar Section—				
Ujjain to Agar	15-3-32	41·72	41·72	
Total open mileage	..	..	..	294·92

Details of construction—

Permanent-way.—The permanent-way consists of 30,36 and 41¼ lb. flat-footed steel rails laid on steel trough sleepers and wooden sleepers.

Ballast.—The line is fully ballasted throughout with broken stone, sand and moorum.

Fencing.—The line is not fenced except in the Ujjain-Agar Branch, where pallisade wooden fencing is erected at a few places in the crowded parts of Ujjain City.

Curves.—The sharpest curve in station yards has a radius of 250 feet. The sharpest curve out of stations has a radius of 287 feet. In Ujjain-Agar Branch the sharpest curves in station yards have a radius of 220 feet. The sharpest curve out of stations has a radius of 191 feet.

Gradients.—The ruling gradient is 1 in 40 on the Gwalior-Shivpuri section, 1 in 80 on the Gwalior-Sheopur section, 1 in 150 on the Gwalior-Bhind section and 1 in 74 on the Ujjain-Agar section.

Agreement—
Main provisions of agreement— *Nil.* The Gwalior Light railway, including Ujjain-Agar Branch is the property of the Gwalior Durbar by whom it was constructed and is maintained, stocked and worked. The working of the trains and traffic of the G. L. Railway was under the control of the Great Indian Peninsula Railway Company up to the 30th June 1913.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14).—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs		Rs.	
1913-14	249·96	69,14,991	5,14,113	2,20,130	3·18	39	57·18
1914-15	249·96	72,26,667	5,31,293	2,16,515	3·00	41	59·25
1915-16	249·96	74,68,981	5,85,642	2,55,475	3·42	45	56·38
1916-17	249·96	75,65,823	5,62,685	2,80,991	3·72	43	50·06
1917-18	249·96	75,81,801	6,57,784	3,58,102	4·72	50	45·56
1918-19	249·96	76,54,655	7,73,596	3,94,782	5·14	59	48·96
1919-20	249·96	77,12,221	7,37,292	3,49,179	4·53	57	52·64
1920-21	249·96	82,79,080	7,06,583	2,61,908	3·16	54	66·93
1921-22	249·96	79,38,319	7,58,390	3,35,381	4·22	58	55·78
1922-23	249·96	85,60,968	8,02,662	4,25,333	4·97	69	52·35
1923-24	249·96	88,50,281	9,19,616	4,62,696	5·23	71	49·69
1924-25	251·63	89,81,887	10,35,727	5,60,113	6·29	80	45·92
1925-26	253·67	92,46,259	8,47,011	3,57,946	3·87	65	57·74
1926-27	253·67	94,88,789	7,60,335	2,35,623	2·48	57	69·01
1927-28	253·20	96,58,772	8,22,015	1,91,761	1·99	62	76·67
1928-29	253·20	97,46,956	9,12,414	3,41,831	3·51	69	62·54
1929-30	253·20	98,15,722	8,23,552	3,19,686	3·26	63	61·18
1930-31	253·20	98,26,275	6,88,992	1,89,722	1·93	52	72·46
1931-32	253·20†	98,73,766	6,90,743	2,16,003	2·19	52	68·73
1932-33	294·92	1,21,62,694	7,96,782	2,24,231	1·84	52	71 89
1933-34	294·92	1,21,21,952	7,78,215	2,39,937	1·98	51	69·17
1934-35	294·92	1,22,57,769	7,25,313	1,26,726	1·03	47	82·52
1935-36	294·92	1,22,63,237	7,52,810	1,95,254	1·59	49	74·10
1936-37	294·92	1,23,00,244	9,51,057	3,45,422	2·80	62	63·72
1937-38	294·92	1,23,12,000	8,52,000	2,38,000	1·93	56	72·07
1938-39	294·92	1,23,17,000	8,66,000	2,39,000	1·94	56	72·40

* Shown in Class II in the History of Indian Railways corrected up to the 31st March 1926.
† Excludes 41·72 miles of Ujjain-Agar Branch opened on 15th March 1932.

14. HOWRAH-AMTA LIGHT RAILWAY (2′ 0″ gauge).*

Managing Agents—MESSRS. MARTIN & CO., CALCUTTA.

Date of registration of the Company.—2nd May 1895.

Running powers—

Foreign line over home line—

Howrah-Sheakhala Light railway, Telkul Ghat to Kadamtala (for passenger and goods trains) 2·00 miles.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Main line—			
Telkul Ghât (Howrah) to Dumjur	1-7-97	9·20	
Dumjur to Bargachia	2-10-97	5·87	
Bargachia to Maju	4-5-98	5·50	
Maju to Amta	1-6-98	6·62	
			27·19
Champadanga branch—			
Bargachia to Jagatbalabpur	2-10-97	1·50	
Jagatbalapur to Autpur	1-6-04	8·50	
Autpur to Champadanga	24-8-08	6·68	
			16·68
TOTAL	..	..	43·87

Details of construction—

Permanent-way.—The permanent-way consists of flat-footed steel rails, 30-lb. to the yard, on cross sleepers of sâl except on the lengths from Kadamtala to Bargachia which are laid with steel rails 35-lb. to the yard. The length from Howrah Ghat to mile 3·29 is laid with 41¼ lb. rails.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve, sanctioned specially for the town of Howrah, has a radius of 144 feet.

Gradients.—The line is practically level throughout, except at the approach of a bridge which has gradient of 1 in 200 for a length of 8 chains.

Agreements and Local Government orders—

Agreement, dated the 12th June 1889, *between the District Board of Howrah and Messrs. Walsh, Lovet and Company on behalf of the Bengal District Road Tramways Company*, as to the grant of a concession to the Company of the right to construct and work a tramway over a portion of the road within the jurisdiction of the Board.

Agreement, dated the 27th September 1889, *between the Municipal Commissioners of Howrah and Messrs. Walsh, Lovett and Company on behalf of the Bengal District Road Tramways Company*, as to the grant of a concession to the Tramways Company of the right to construct and work a tramway over a portion of the road within the jurisdiction of the Commissioners.

Bengal District Road Tramways Company order published under the Bengal Government, Public Works Department, Notification No. 111, dated the 26th March 1895, authorising the construction of a tramway from Howrah to Amta.

Agreement, dated the 3rd May 1897, *between the District Board of Howrah and the Bengal District Road Tramways Company (Howrah-Amta)*, in amendment of the agreement of 12th June 1889.

Agreement, dated the 16th August 1901 (supplemental to the agreements of 1889 and 1897), *between the District Board of Howrah and the Howrah-Amta Light Railway Company*, as to the construction and working of an extension from Jagatbalabpur to Champadanga.

Howrah-Amta Extension order published under the Bengal Government, Railway Department, Notification No. 75-R., dated the 7th April 1902, authorising the construction of the extension from Jagatbalabpur to Champadanga.

Main provisions of agreements and Local Government orders—

(i) *Land.*—Provided at the cost of Company, other than one side of portions of the road between Howrah and Amta the free use of which is authorised for the purpose of laying the line only.

(ii) *Aid by the Local Authorities.*—The District Board of Howrah either exempt the Company from the tax on account of road cess, or exact only a nominal tax for a period of 21 years, with power of renewal. The Municipal Commissioners of Howrah allow the Company free use of so much of the municipal roads as is necessary for the purpose of laying the line, for a period of 20 years from the 27th March 1895; and thereafter levy a track rent of Rs. 2,000 per mile per annum.

* Shown in class II in the History of Indian Railways Corrected up to 31st March 1933.

14. HOWRAH-AMTA LIGHT RAILWAY (2′ 0″ gauge)—*concld.*

Main provisions of agreements and Local Government orders—*concld*

The District Board also pay to the Company, by way of interest on the capital expended, such sum of money as may be required to make the net profits of the Company equivalent to a dividend at the rate of 4 per cent. per annum, provided that the Board is not involved on this account in a greater liability than Rs. 1,100 per annum per mile constructed and opened with a maximum of Rs. 28,000 per annum.

(iii) *Distribution of profits.*—Surplus profits in excess of 4 per cent., after setting aside such sums as the Directors may decide, upon the capital for the time being of the Company are divisible in equal proportions between the District Board of Howrah and the Company.

(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to Local Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } *Nil.*

(vi) *Power of the Local Authority to determine agreement.*—Upon the expiration of 21 years from the date of the Local Government order authorising the construction of the line, or at the end of every 7 years thereafter, the District Board of Howrah, in conjunction with the District Board of Hooghly and the Municipality of Howrah, have, by giving 6 months' notice, the right of purchasing the line by paying to the Company its value as a dividend-earning investment, together with a bonus of 20 per cent. thereon.

N.B.—The local authority did not exercise their right of purchasing the line in 1923.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement* [*if not determined under* (vi)].—None specified.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay including suspense, to end of each year, i.e., outlay on (*i*) lines *open*, and (*ii*) lines partly or wholly under construction.	Gross earnings	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Amount credited to Renewal Reserve Account.	Share of net profits paid to the District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	
1913-14	43·87	25,61,026	5,94,343	2,68,927	10·50	65,000	47,009	1,56,918	6·20	261	54·70
1914-15	43·87	26,70,739	6,13,106	2,38,783	8·94	20,000	51,593	1,67,190	6 22	269	61·05
1915-16	43·87	26,87,496	6,17,537	2,60,185	9·68	22,500	60,144	1,77,541	6·67	271	57·87
1916-17	43·87	26,43,718	6,06,612	2,68,431	10·15	20,000	63,055	1,85,376	7·01	266	55·74
1917-18	43·87	26,52,602	6,02,385	2,76,099	10·40	33,000	62,863	1,80,236	6·79	264	54·17
1918-19	43·87	27,02,431	6,54,881	2,87,955	10·65	50,000	59,722	1,78,233	6·59	287	56·02
1919-20	43·87	26,94,595	7,17,767	2,67,749	9·93	30,000	62,267	1,75,482	6·51	314	62·69
1920-21	43·87	27,61,373	8,54,740	3,98,963	14·44	1,00,000	86,825	2,12,138	7·68	382	53·32
1921-22	43·87	28,69,108	8,65,826	3,38,809	11·81	1,00,000	61,709	1,77,100	6·17	379	60·85
1922-23	43·87	27,76,196	9,65,229	3,79,226	13·66	1,00,000	88,375	1,90,851	6·87	423	60·70
1923-24	43·87	27,27,168	10,13,438	4,54,798	16·67	1,35,000	1,02,820	2,16,978	7·95	444	55·12
1924-25	43·87	27,96,440	10,41,998	4,89,862	17·51	1,70,000	1,09,366	2,10,496	7·52	457	52·98
1925-26	43·87	29,09,180	10,74,119	5 50,394	18·97	1,70,000	1,28,364	2,52,010	8·68	470	48·76
1926-27	43·87	29,74,663	10,37,977	4,99,960	16·87	1,25,000	1,29,236	2,83,781	9·53	455	51·83
1927-28	43·87	30,59,586	10,69,252	3,70,235	12·10	1,60,000	1,16,256	2,53,979	8·27	468	65·37
1928-29	43·87	32,25,578	10,50,929	3,39,807	10·53	1,25,000	86,102	2,53,705	7·86	460	67·66
1929-30	43·87	32,34,570	11,27,418	3,79,203	11·72	1,60,000	1,25,855	2,53,348	7·83	494	66·37
1930-31	43·87	32,67,440	10,48,601	2,79,244	8·54	1,60,000	57,548	2,21,696	6·78	460	73·37
1931-32	43·87	31,84,685	9,89,071	2,30,003	7·22	1,95,000	34,360	1,95,643	6·14	434	76·75
1932-33	43·87	31,12,508	9,45,303	2,72,561	8·76	1,55,000	57,725	2,14,836	6·90	414	71·17
1933-34	43·87	30,98,104	9,07,668	2,64,050	8·54	1,55,000	63,540	2,00,510	6·46	398	70·88
1934-35	43·87	30,81,162	9,21,543	2,95,949	9·50	1,55,000	75,795	2,20,154	7·14	404	67·80
1935-36	43·87	31,87,346	8,77,782	2,44,641	7·67	1,55,000	74,604	1,70,037	5·33	385	72·56
1936-37	43·87	31,75,200	8,34,141	2,39,130	7·53	1,28,000	62,546	1,76,584	5·56	366	71·30
1937-38	43·87	31,64,261	8,70,432	2,64,945	8·37	1,28,000	74,937	1,90,008	6·00	382	69·56
1938-39	43·87	31,47,859	8,89,937	2,45,679	7·80	1,28,000	55,114	1,90,565	6 05	390	72·40

15. HOWRAH-SHEAKHALA LIGHT RAILWAY (2′ 0″ gauge)

Managing Agents—MESSRS. MARTIN & CO., CALCUTTA.

Date of registration of the Company.—19th June 1895

Running powers.—

Home line over foreign line—

Telkul Ghat to Kadamtala, Howrah-Amta Light Railway, for passenger and goods trains, 2·06 miles.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total
1	2	3	4
Main line—			
Kadamtala to Chanditala	2-8-97	8·88	
Chanditala to Kistrampur	10-9-97	3·75	
Kistrampur to Sheakhala	7-11-97	4·75	
			17·38
Janai branch—			
Chanditala to Janai	5-5-98	2·37	
			2·37
TOTAL	..	..	19·75

Details of construction—

Permanent way.—The permanent-way consists of flat-footed steel rails, 30 lbs. to the yard, laid on cross sleepers of sâl, with the exception of the last 7 miles which are laid with flat-footed rails weighing 35 lbs. to the yard.

Ballast.—The line is ballasted throughout.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 144 feet radius at Howrah town.

Gradients.—The line is practically level throughout.

Agreements and Local Government order—

Agreement, dated the 12th June 1889, *between the District Board of Howrah and Messrs. Walsh, Lovett and Company of Calcutta (the Promoters), for and on behalf of the Bengal District Road Tramways Company*;

Agreement, dated the 16th July 1889, *between the District Board of Hooghly and Messrs. Walsh, Lovett and Company of Calcutta (the Promoters), for and on behalf of the Bengal District Road Tramways Company*;

Agreement, dated the 27th September 1889, *between he Municipal Commissioners of Howrah and Messrs. Walsh, Lovett and Company of Calcutta (the Promoters), for and on behalf of the Bengal District Road Tramways Company*;

} as to the grant of a concession of the right to construct, maintain and work the line from Howrah to Sheakhala.

The Bengal District Road Tramways Company order published under the Bengal Government, Public Works Department, Notification No. 112, dated the 26th March 1895, authorising the construction of the line from Howrah to Sheakhala.

Agreement, dated the 10th January 1898, *between the District Board of Hooghly and the Bengal District Road Tramways Company (Howrah-Sheakhala)*, providing for an increase in the amount of subsidy guaranteed to be paid by the District Board.

Main provisions of agreements and Local Government order—

(i) *Land.*—Provided at the cost of the Company, other than one side of portions of the road between Howrah and Sheakhala, the free use of which is authorised for the purpose of laying the line.

(ii) *Aid by the local authorities.*—The District Board of Howrah, for 21 years, with power of renewal exempt the company from the tax on account of road cess, or exact only a nominal tax; and the District Board of Hooghly guarantee to make up the net profit of the Company equivalent to a dividend of 4 per cent. per annum on the capital actually paid up and expended, subject to a maximum of Rs. 950 per annum per mile of line constructed and open. The Municipal Commissioners of Howrah allow to the Company free use of so much of the Municipal roads as is necessary for the purpose of laying the line, for a period of 20 years from the 27th March 1895 and thereafter levy a tract rent of Rs. 2,000 per mile per annum.

(iii) *Distribution of profits.*—Surplus profits in excess of 4 per cent., after setting aside such sums as the Directors may decide, upon the capital for the time being of the Company are divisible between the District Board of Hooghly and the Company in proportion of $\frac{1}{3}$rd to the former and $\frac{2}{3}$rds to the latter.

15. HOWRAH-SHEAKHALA LIGHT RAILWAY (2′ 0″ gauge)—*concld.*

Main provisions of agreements and Local Government order—*concld.*

(iv) *Rates and fares.*—Certain maximum rates of fares for passengers and tariff of charges for goods have been fixed. Full control over charges of all kinds is reserved to the Local Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.— } Not specified.

(vi) *Power of the Local authority to determine agreement.*—The District Board of Howrah or that of Hooghly, each in conjunction with the other and with the Municipal Commissioners of Howrah, have the right of determining the agreement and purchasing the line after 21 years from the date of the Local Government order authorising its construction or at the end of every 7 years thereafter. If purchased by the District Board of Howrah the price will be equal to the value of the whole line, *plus* a bonus of 20 per cent. thereon; if purchased by the District Board of Hooghly the price will be the value of the whole line, *plus* a bonus of 15 per cent. thereon.

N.B.—The Local Authority did not exercise their right of purchasing the line in 1923.

(vii) *Power of the Company to surrender agreement.*—Nil.

(viii) *Term of agreement* [*if not determined under* (vi)].—None specified.

Statistics of working.—(Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14).—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Amount credited to Renewal Reserve Account.	Share of net profits paid to the District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11	12
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	
1913-14 .	19·75	7,18,108	1,57,837	69,653	9·69	23,000	6,282	40,371	5·62	154	55·87
1914-15 .	19·75	8,26,846	1,56,032	70,546	8·53	20,000	7,231	43,315	5·23	152	54·78
1915-16 .	19·75	7,70,777	1,62,490	62,125	8·06	10,000	8,712	43,413	5·63	158	61·76
1916-17 .	19·75	7,63,657	1,61,042	65,167	8·53	8,000	9,696	47,471	6·22	157	59·53
1917-18 .	19·75	7,63,974	1,61,947	65,380	8·55	8,000	9,815	47,565	6·22	157	59·62
1918-19 .	19·75	7,61,892	1,75,335	79,897	10·48	21,000	9,694	49,203	6·46	170	54·43
1919-20 .	19·75	7,64,184	1,71,991	65,597	8·58	20,000	6,453	39,144	5·12	167	61·86
1920-21 .	19·75	7,84,419	1,76,437	69,746	8·89	14,000	9,711	45,835	5·84	178	60·46
1921-22 .	19·75	8,16 954	1,87,602	75,477	9·23	17,000	9,662	48,815	5·97	182	59·76
1922 23 .	19·75	8,23 958	2,15,507	71,774	8·71	25,000	6,633	40,141	4·87	209	66·69
1923 24 .	19·75	7,88,116	2,23,244	1,02,957	13·06	40,000	12,279	50,678	6·43	217	53·88
1924-25 .	19·75	7,87,327	2,22,620	1,01.576	12·90	50,000	9,660	41,916	5·32	217	54·37
1925-26 .	9·75	8,09,147	2,36,904	1,13,055	13·97	50,000	11,749	51,306	6·34	:30	52·29
1926-27 .	19·75	8,19,865	2,25,397	98,092	11·96	30,000	12,260	55,832	6·81	219	56·48
1927-28 .	19·75	8,24,229	2,24,567	71,468	8·67	20,000	11,671	59,797	7·25	218	68·17
1928-29 .	19·75	8,24,786	2,28,751	66,744	8·08	23,000	9,568	57,176	6·93	223	70·82
1929-30 .	19·75	8,34,737	2,33,390	65,111	7·80	20,000	9,097	56,014	6·70	227	72·09
1930-31 .	19·75	8.38,408	2,43,775	51,648	6·15	40,000	4,961	46,687	5·56	238	78·81
1931-32 .	19·75	8,54,924	2,07,263	37,711	4·41	26,000	257	37,454	4·38	202	81·81
1932-33 .	19·75	8,36,174	1,94,548	26,437	3·16	28,000	Nil	26,437	3·16	189	86·41
1933-34 .	19·75	8,29,369	1,79,718	25,056	3·04	25,000	83	24,973	3·01	175	86·03
1934-35 .	19·75	8,26,661	1,68,785	22,606	2·70	20,000	Nil	22,606	2·70	164	86·60
1935-36 .	19·75	8,56,062	1,95,366	36,516	4·26	27,000	4,138	32,378	3·78	190	81·31
1936-37 .	19·75	8,63,219	1,94,089	35,370	4·10	30,000	1,779	33,591	3·89	189	81·80
1937-38 .	19·75	8,55,258	1,89,606	30,416	3·55	25,000	34	30,382	3·55	185	83·96
1938-39 .	19·75	8,55,258	1,88,516	29,938	3·49	25,000	Nil	29,938	3·50	184	84·08

16. JAGADHRI LIGHT RAILWAY (2′ 0″ gauge.)

Date of registration of the Company.—27th August 1909.

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4
Jagadhri station to Jagadhri town	11-8-11	3·31	3·31

Details of construction—

Permanent-way.—The permanent-way consists of 24-lb. flat-footed steel rails laid on sâl and deodar sleepers.

Ballast.—The line is ballasted for about a furlong in one place only.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 300.

Local Government order—

The Jagadhri Light Railway Company order of 1908, published under the Punjab Government Notification No. 754, dated the 15th December 1909, as to the construction, maintenance and working of a steam tramway from Jagadhri station to Jagadhri city.

Main provisions of Local Government order—

(i) *Land.*—Except the portions of the District Board and provincial roads in the district of Ambala which the line is authorised to cross, all land for the purpose of the undertaking is provided at the cost of capital

(ii) *Government aid.*—Nil.

(iii) *Distribution of profits.*—The whole of the profits belongs to the Company.

(iv) *Rates and fares.*—To be fixed from time to time by the Company with the approval of the Local Government.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin.— } Not specified.

(vi) *Power of the Government to determine contract.*—At the expiry of 21 years after first opening throughout for traffic, or at subsequent intervals of 10 years, the local authority, by giving 12 months' notice, has the right to terminate the contract and purchase the undertaking, with the previous sanction of the Local Government, by paying to the Company 25 times the yearly average net earnings of the line during the 3 years preceding the purchase with a maximum of 120 and minimum of 100 per cent. of the cost price.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi)].—None specified.

Statistics of working.—(Those for the periods prior to 1913-14 will be found in Appendix 1 to the Railway Administration Report for 1913-14).—

Year. 1	Mileage open at end of each year. 2	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open, and (*ii*) lines partly or wholly under construction 3	Gross earnings. 4	Net earnings. 5	Percentage of net earnings on total capital outlay given in column (3). 6	Earnings per mile per week. 7	Proportion of expenses to earnings. 8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	3·31	1,14,132	25,231	3,423	2·99	147	86·43
1914-15	3·31	1,13,636	22,320	2,758	2·42	130	87·43
1915-16	3·31	1,13,226	22,713	2,156	1·90	132	90·66
1916-17	3·31	1,12,224	19,593	1,068	0·95	113	94·55
1917-18	3·31	1,12,224	18,793	1,573	1·40	109	91·63
1918-19	3·31	1,12,284	17,965	326	0·29	104	98·18
1919-20	3·31	1,10,401	25,094	8,869	8·03	146	64·66
1920-21	3·31	1,11,336	29,252	13,674	12·28	186	53·25
1921-22	3·31	1,12,242	29,216	10,750	9·57	185	63·20
1922-23	3·31	1,13,765	32,186	11,034	9·70	187	65·72
1923-24	3·31	1,13,775	30,809	11,628	10·22	179	62·25
1924-25	3·31	1,13,775	31,904	12,298	10·80	185	58·31
1925-26	3·31	1,13,775.	26,187	6,801	5·98	152	73·08
1926-27	3·31	1,13,775	23,352	4,216	3·71	135	81 94
1927-28	3·31	1,13,957	26,460	6,098	5·35	153	76·95
1928-29	3·31	1,14,314	29,335	8,919	7·80	170	69·59
1929-30	3·31	1,18,469	21,874	319	0·27	127	98·54
1930-31	3·31	1,18,051	18,258	1,177	1·00	106	93·56
1931-32	3·31	1,18,151	12,271	403	0·34	71	96·71
1932-33	3·31	1,18,233	12,945	2,082	1·70	75	72·69
1933-34	3·31	1,17,987	13,297	1,359	1·15	78	89·78
1934-35	3·31	1,13,157	13,485	1,154	1·02	79	91·44
1935-36	3·31	1,13,315	12,489	35	0·03	73	99·72
1936-37	3·31	1,12,844	17,290	3,434	3·04	100	80·14
1937-38	3·31	1,13,255	15,479	1,419	1·25	90	90·83
1938-39	3·31	1,12,563	15,576	667	0·59	90	95·72

17.* JESSORE-JHENIDAH RAILWAY (2′ 6″ gauge).

Managing Agent.—Mr. B. C. Roy, Calcutta.

Date of registration of the Company.—4th August 1924.

The sanction accorded by the Government of Bengal to the construction of this line under the Indian Railways Act, IX of 1890, was approved by the Government of India in their letter No. 275-R.P., dated the 2nd December 1910.

The line was constructed by the Jessore-Jhenidah Railway Company which went into liquidation and the assets of the railway were purchased as a going concern by the Jhenidah Railway Syndicate, Limited, on the 24th September 1924.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Main line—			
Jessore to Jhenidah	1-10-13	29·00	
Branch—			
Shibnagar to Kotchandpur	1-10-13	7·75	
Total	..	..	36·75

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid chiefly on sâl sleepers.

Ballast.—The line is ballasted throughout with brick.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 313 feet radius.

Gradients.—The ruling gradient is 1 in 150.

Contract and agreement—

Contract dated the 14th January 1930, *between the Secretary of State and the Jhenidah Railway Syndicate*, as to the construction, maintenance and working of the line.

Agreement, dated the 6th December 1924, *between the District Board of Jessore and the Jhenidah Railway Syndicate*, as to the grant of certain concessions to the latter by the former under certain conditions.

Main provisions of contract and agreement—

(i) *Land.*—Land on one side of the District Board road not exceeding 8 feet in width granted free, any additional land being acquired by Government at the cost of the Company.

(ii) *Aid by the District Board.*—The District Board of Jessore have lent to the Syndicate Rs. 1,00,000 repayable by the latter in sixteen equal yearly instalments without interest. The Board will recommend and apply to the Local Government for the exemption of the Company from road cess, or for the levy of only a nominal tax for a period of 21 years from the date of opening of the line for traffic.

(iii) *Distribution of profits.*—Net profits, if any, for each year are distributable amongst the Members of the Syndicate.

(iv) *Rates and fares.*—Rates and fares shall be such as may from time to time be arranged by the Secretary of State and the classification of goods shall be in conform ty with that in force on State railways of the same gauge.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin, and the persons in charge thereof.—

} To be conveyed in the same manner and subject to the same regulations and conditions as are in force on State railways of the same gauge.

(vi) *Power of the Government to determine contract.*—The Government may, by giving 12 months previous ' notice of purchase ', determine the contract either on the 31st March 1943, or on the 31st December in the last year of any subsequent period of 10 years, paying to the Company a sum equal to the Capital expenditure of the railway since the 25th September 1924 plus Rs. 10,00,000. The money payable shall carry interest at the rate of 3 per cent. per annum from the time the contract terminates up to the time of payment by the Secretary of State.

The Government may also, by giving ' notice of special purchase ', determine the contract at any time in the following cases: —

(*a*) when it is considered desirable to alter the gauge of the railway;

(*b*) when it is considered desirable to convert the railway into a line of through communication and

*The Railway has been closed from 1st April 1938.

17. JESSORE-JHENIDAH RAILWAY (2′ 6″ gauge)—*concld.*

Main provisions of contract and agreement—*concld.*

(*c*) when it is considered desirable to extend the railway (without altering the gauge or making the line part of a through route) and the Company is unable or unwilling to provide funds for such extension.

If the contract be determined by ' notice of special purchase ' the Government will pay to the Company a sum equal to the capital expenditure of the railway since the 25th September 1924 plus Rs. 10,00,000 plus 15 per cent. on the sum of these two amounts. The money payable shall carry interest at the rate of 3 per cent. per annum from the time the contract terminates up to the time of payment.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of Contract* [*if not determined under* (vi)].—Not specified.

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from (+) or share of net profits to, (—), the District Board.	Total income [column 5 +or— column 7].	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14 .	36·80	12,36,610	49,667	12,345	0·98	..	12,345	0·98	52	75·55
1914-15 .	36·80	12,49,383	77,508	—16,468	..	**	..	..	40	121·25
1915-16.	36·80	12,80,742	94.740	—40,038	..	**	..	..	49	142·26
1916-17 .	36·80	13,49,378	1,10,698	—32,470	..	**	..	..	58	129·34
1917-18 .	36·75	13,96,544	88,775	—55,760	..	+53,000	—2,760	..	46	162·81
1918-19 .	36·75	14,37,683	1,03,283	—26,716	..	+50,000	+23,284	1·62	54	125·86
1919-20 .	36·75	14,33,393	1,43,448	21,061	1·47	+34,000	+55,061	3·84	75	85·32
1920-21 .	36·75	14,47,252	1,56,731	3,010	0·21	+17,000	+20,010	1·38	81	98·08
1921-22 .	36·75	14,48,314	1,40,450	—18,860	..	†	—18,860	..	73	113·43
1922-23	36·75	14,48,961	1,27,492	—43,763	..	†	—43,763	..	67	134·32
1923-24 .	36·75	14,32,495	1,27,761	9,485	0·66	†	9,485	0·66	67	92·58
1924-25 .	36·75	14,28,730	1,05,913	17,305	1·21	..	17,305	1·21	55	83·66
1925-26 .	36·75	14,53,032	1,49,259	57,069	3·92	..	57,069	3·92	78	61·90
1926-27 .	36·75	14,74,526	1,42,408	39,986	2·71	..	39,986	2·71	74	71·92
1927-28 .	36·75	14,85,833	1,22,576	20,042	1·34	..	20,042	1·34	64	83·64
1928-29	36·75	14,99,200	1,12,410	8,022	0·54	..	8,022	0·54	59	92·86
1929-30 .	36·75	‡12,84,315	1,07,997	—7,300	—0·57	..	—7,300	—0·57	57	106·47
1930-31 .	36·75	(*a*)12,73,758	73,769	—12,398	—1·02	..	—12,398	—1·02	38	117·81
1931-32 .	36·75	12,63,000	62,000	—16,000	—1·25	..	—16,000	—1·25	32	125·43
1932-33 .	*	*	*	*	*	*	*	*	*	*
	Closed to all kinds of traffic from 1st May 1936.									

*The line has been closed from 1st April 1933. Figures for 1932-33 are not available.

†Payment of subsidy suspended by the District Board.

‡In accordance with agreement dated the 14th January 1930 with the Secretary of State.

(*a*) The reductions as compared with the previous year are due to credits to final heads and increase in the credit balance under the suspense head.

**Adjusted in subsequent years.

NOTE.—The Railway was closed on 1st April 1933 when the Jhenidah Railway Syndicate went into liquidation. It was subsequently purchased by Messrs. Tulsiram Jankiram, a firm of Calcutta, in public auction and opened for traffic on the following dates—

Passenger Traffic	1st July 1934.
Goods Traffic	26th January 1934.
Interchange of through goods traffic	15th May 1934.

The railway was finally closed to all kinds of traffic with effect from 1st May 1936. The dismantlement of the line was also agreed to in Railway Board's letter No. 8491-F., dated 13th June 1936.

18. JORHAT RAILWAY (2′ 0″ gauge)

This line was originally known as the "Kokila Mookh tramway" or the "Kokila Mookh state railway" Its construction out of the Provincial revenues of Assam, for the convenience of the numerous tea-gardens in the neighbourhood of Jorhat, was approved by the Government of India in their letter No. 621-R.C., dated the 11th August 1882.

The line together with rolling stock is owned and was upto 30th September 1927 worked by the State From 1st October 1927, the maintenance, management and working of the line have been made over to Messrs. Macneill and Co., Agents, River Steam Navigation Co., Ltd., and Messrs. Kilburn & Co., Managing Agents, India General Navigation and Railway Co., Ltd.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.	Grand total.
1	2	3	4	5
Main line—				
Borghop to Gosaigaon	22-10-01	4·75		
Gosaigaon to Jorhat	13-9-83	7·00		
Jorhat to Dhali river	15-12-84	9·50		
Dhali river to Titabar	16-7-87	1·75		
			23·00	
Cold weather line—				
Borghop to a point further down the river	3-12-11	2·50		
			2·50	
Mariani branch—				
Chenimara Junction to Mariani	1-12-86	7·00		
			7·00	
TOTAL	..	..	..	32·50

Details of construction—

Permanent-way.—2·51 miles between Jorhat and Gosaigaon are laid with steel rails, 30-lb. to the yard. Four miles, between Jorhat and Cinnamara, 7 miles, between Cinnamara and Mariani, 6·50 miles, between Cinnamara and Titabar, and 4·00 miles, between Jorhat and Gosaigaon, about three-fourth mile, between Borigaon and Gosaigaon, 4·74 miles, between Gosaigaon and Kokilamukh the alternative cold weather section across Gosaigaon channel and 0·06 mile of the Jorhat Putty siding are laid with steel rails, 25-lbs. to the yard. One and a half miles, between Cinnamara and Titabar are laid with steel rails, 24-lb. to the yard. The rest of the line is laid with steel rails, 18-lb. to the yard.

Ballast.—The line is unballasted.

Fencing.—The line is not fenced.

Curves.—The sharpest curve is of 480 feet radius.

Gradients.—The ruling gradient is about 1 in 800, except on the Jorhat-Chenimara section where it is 1 in 400.

Agreement—

Dated the 21st September 1927 between the Secretary of State and the River Steam Navigation Company, Limited, and the India General Navigation and Railway Co., Ltd., as to the working of the line.

Main provisions of Agreement—

(i) *Distribution of profits.*—The Companies are to retain 50% of the net profits of the working of the Railway and the balance is to be paid to Government. In case of loss the Companies are to bear the whole of such loss. The net profits shall be the balance of gross receipts as derived from all tolls, fares, rates and charges and other sources of revenue of every kind arising in respect of the working of the Railway and incidental thereto after deduction thereout of all expenditure and outgoings and a monthly allowance of Rs. 500 towards the expenses of the Companies' Calcutta establishment and Local Steamer Agents' establishments in connection with the administration of the Railway.

(ii) *Rates and fares.*—As fixed by the tariffs of the Railway as in existence at the date of taking over in so far as the same are found to yield a reasonable return.

(iii) *Special obligations.*—Nil.

(iv) *Powers of the Government to determine agreement.*—The agreement will be in force for 10 years from 1st October 1927, and on the expiry of such period if it is decided to renew the agreement for a further term the Companies shall have the first offer. On the Secretary of State taking over the Railway the Companies to be paid the excess in value, if any, of the properties so taken over as compared with the value of the properties (other than land) made over to the Companies at the commencement of the agreement.

(v) *Powers of the Company to terminate agreement.*—Nil.

(vi) *Term of agreement.*—10 years.

18. JORHAT RAILWAY (2′ 0″ gauge)—*concld.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14).

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Interest.	Gain or loss to the State pertaining to each year.	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1913-14 .	32·50	10,64,859	1,30,085	39,846	3·74	35,717	+4,129	82	69·36
1914-15 .	32·50	10,71,745	1,21,520	—6,352	..	37,382	—43,734	78	105·20
1915-16 .	32·50	10,90,695	1,56,852	54,790	5·04	37,545	+17,245	98	64·97
1916-17 .	32·50	11,23,755	1,64,905	63,178	5·62	36,499	+26,679	98	61·82
1917-18 .	32·50	11,12,262	1,42,055	23,438	2·11	38,828	—15,390	85	83·50
1918-19 .	32·50	10,91,312	1,13,273	—8,014	..	38,362	—46,376	68	107·08
1919-20 .	32·50	11,19,392	1,26,067	5,712	0·51	37,201	—31,489	78	95·47
1920-21 .	32·50	11,41,093	1,31,611	—15,637	..	37,794	—53,341	81	111·88
1921-22 .	32·50	12,84,135	1,50,955	—29,158	..	42,791	—71,949	90	119·32
1922-23 .	32·50	12,78,210	1,75,392	—33,279	..	45,993	—79,272	104	118·97
1923-24 .	32·50	12,60,456	1,80,138	—28,661	..	45,650	—74,311	107	115·91
1924-25	32·50	13,18,226	1,87,920	26,662	2·02	65,143*	—38,481	111	85·81
1925-26 .	32·50	13,49,922	1,98,857	7,607	..	48,934	—56,547	122	103·82
1926-27 .	32·50	13,25,479	2,10,079	—5,889	..	48,064	—53,953	129	102·80
1927-28 .	32·50	13,22,106	2,01,000†	—6,000†	..	47,369	—53,369	119	102·99
1928-29‡.	32·50	13,22,074	2,12,214	—442	—0·03	47,284	—47,284	126	100·21
1929-30 .	32·50	13,22,000	2,04,763	—2,347	..	§	§	121	101·15
1930-31 .	32·50	13,22,000	1,79,868	—482	..	..	..	106	100·82
1931-32 .	32·50	13,22,074	1,46,748	—2,227	—0·15	49,762	—49,762	87	101·52
1932-33 .	32·50	13,22,000	1,39,788	—21,721	—1·66	§	§	83	115·54
1933-34 .	32.50	13,22,000	1,00,448	—40,608	—3·10	§	§	59	140·43
1934-35 .	32·50	13,22,000	1,19,813	—18,151	—1·36	§	§	71	115·15
1935-36 .	32·50	13,22,000	1,27,303	—21,414	—1·59	§	§	75	116·82
1936-37 .	32·50	13,22,000	1,12,864	—36,397	—2·72	§	§	67	132·25
1937-38 .	32·50	13,22,000	97,683	—43,506	—3·25	§	§	58	144·53
1938-39 .	32·50	13,22,000	1,14,236	—32,344	—2·42	§	§	68	128·32

* Including indirect charges of Rs. 18,255.

† The figures are approximate.

‡ Figures are in respect of calendar year from 1928-29 onwards.

§ Figures not available.

19. KALIGHAT-FALTA RAILWAY (2′ 6″ gauge).

Managing Agents.—MESSRS. MCLEOD & CO., CALCULTA.

Date of registration of the Company.—April 1915.

The construction of this line by the Kalighat-Falta Railway Company was authorised in Railway Board's telegram No. $\frac{84\text{-P.}}{1349}$, dated the 26th April 1915.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Gholeshapur (near Kalighat) to Falta	28-5-17	25·33	
Gholeshapur to Majherat temporary connection with Eastern Bengal Railway .	1-5-20	0·92	
TOTAL . . .	..	..	26·25

Details of construction—

Permanent-way.—The permanent-way consists of 35-lb. flat-footed rails on sâl sleepers.

Ballast.—The line is ballasted with brick throughout.

Fencing.—The line is unfenced except between Thakurpukur and Gholeshapur mile 22 to mile 25¼.

Curves.—The sharpest curve is of 573 feet radius.

Gradients.—The ruling gradient is 1 in 200.

Contract—

Dated the 13th December 1921, *between the Secretary of State and the Kalighat-Falta Railway Company, Limited*, as to the construction, maintenance and working of the line.

Main provisions of contract—

(i) *Land.*—Provided by Government free of cost to the Company.

(ii) *Government aid.*—When the net receipts shall not be sufficient to pay interest at the rate of 3½ per cent. per annum on the paid-up share capital, the Secretary of State shall pay to the Company a sum which together with the net receipts will make up an amount equal to 3½ per cent.

(iii) *Distribution of profits.*—When the net receipts in any year exceed 5 per cent. on the paid-up share capital such excess shall be divided equally between the Secretary of State and the Company. When the net receipts for any year do not exceed 5 per cent. per annum on the paid-up share capital the whole of such net receipts shall belong to the Company.

(iv) *Rates and fares.*—Rates and fares shall be such as may from time to time be sanctioned by the Secretary of State and the classification of goods shall be in conformity with that from time to time in force on State railways of a similar gauge.

(v) *Special obligations as to the conveyance of troops, police, etc.*—To be conveyed in the same manner and subject to the same regulations and conditions as are in force on State railways of a similar gauge.

(vi) *Power of Government to determine contract.*—The Secretary of State may at any time, by giving six months' notice, assume the working of the railway by State or any other agency, if the Company are guilty of any breach of contract, or gross mismanagement, or if the working expenses have exceeded the gross earnings for three consecutive years.

The Secretary of State may, by giving 12 months' previous "notice of purchase", determine the contract either on the 31st March 1947 or on the 31st March in the last year of any subsequent period of ten years, paying to the Company a sum of money equal to 25 times the amount of the average of the yearly net earnings during the 3 years immediately preceding, but the amount so payable shall not exceed by more than 20 per cent. the total capital expenditure or be less than such capital expenditure.

The Secretary of State may also, by giving 12 months' previous "notice of special purchase", determine the contract at any time in the following cases:—

(*a*) When it is considered desirable that the gauge of the railway should be altered.

(*b*) When it is desired to convert the railway into a line of through communication.

(*c*) When it is desired to extend the railway and the Company does not, within six months from date of formal requisition, raise such additional capital.

If the Contract is determined by "notice of special purchase" the Secretary of State shall pay the Company 25 times the average of yearly net earnings during the 3 years immediately preceding or 115 per cent. of the total capital expenditure whichever may be greater.

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract.*—Shall remain in force until determined under (*vi*) above.

19. KALIGHAT-FALTA RAILWAY (2′ 6″ gauge)—*concld.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Amount on account of interest recoverable from (+), or moiety of profits payable to (—), the Secretary of State.	Total income (column 5+ column 7).	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs	Rs.		Rs.	
1917-18 .	25·33	17,36,978	88,697	20,146	1·16	..	20,146	1·16	80	77·28
1918-19 .	25·33	17,59,839	1,88,536	69,662	3·96	..	69,662	3·96	143	63·05
1919-20 .	25·33	18,09,312	2,20,070	91,338	5·05	..	91,338	5·05	167	58·49
1920-21 .	26·25	18,42,607	2,50,703	97,621	5·30	—5,243	92,378	5·01	184	61·06
1921-22 .	26·25	18,58,066	3,02,607	1,15,649	6·22	—13,970	1,01,679	5·47	222	61·78
1922-23 .	26·25	19,19,552	3,28,092	89,317	4·65	..	89,317	4·65	240	72·77
1923-24 .	26·25	19,78,658	3,37,925	1,18,852	6·01	—13,600	1,05,252	5·32	248	64·83
1924-25 .	26·25	20,11,752	3,55,673	1,27,311	6·23	—16,017	1,11,294	5·53	260	64·21
1925-26 .	26·25	21,53,341	2,86,402	41,077	1·91	+39,498	80,575	3·74	2 0	85·66
1926-27 .	26·25	22,85,347	2,42,696	5,177	0·23	+84,728	89.905	3·93	178	97·87
1927-28 .	26·25	22,79,254	2,88,490	46,637	2·05	+44,405	91,042	3·99	211	83·83
1928-29 .	26·25	22,90,965	3,13,758	77,115	3·37	+9,974	87,089	3·80	230	75·42
1929-30 .	26·25	23,59,615	2,86,248	38,321	1·62	+49,832	88,153	3·74	210	86·61
1930-31 .	26·25	24,33,289	2,46,721	1,503	0·06	82,999	84,502	3·47	181	99·39
1931-32 .	26·25	24,30,984	2,44,706	41,677	1·71	43,936	85,613	3·52	179	82·97
1932-33 .	26·25	24,21,857	1,86,981	9,344	0·39	74,400	83,744	3·46	137	95·00
1933-34 .	26·25	24,16,799	1,75,724	1,819	0·08	82,045	83,864	3·47	129	98·97
1934-35 .	26·25	24,12,818	1,54,866	—6,599	—0·25	90,862	84,263	3·49	113	104·26
1935-36 .	26·25	24,13,261	1,51,113	—7,296	—0·29	88,439	81,143	3·36	111	104·83
1936-37 .	26·25	24,17,818	1,59,993	12,563	0·52	68,534	81,097	3·35	117	92·15
1937-38 .	26·25	24,37,396	1,73,205	2,155	0·09	76,940	79,095	3·25	127	98·76
1938-39 .	26·25	24,38,434	1,80,431	—14,792	—0·62	94,239	79,447	3·26	132	108·20

20. KULASEKARAPATNAM LIGHT RAILWAY (2′ 0″ gauge).

Managing Agents.—MESSRS. PARRY & Co., MADRAS.

This line in the Tinnevelly district was originally constructed for the sole use of the East India Distilleries and Sugar Factories (Limited) of Madras. Its maintenance and use for public traffic were authorised in Madras Government Orders No. 1134-L., dated the 19th June 1914 and No. 634-A.L., dated the 10th May 1918, subsequently superseded by order No. 27 L. and M., dated the 4th January 1922 and G. O. No. 745-Ry Mis, dated 1st March 1929 and G. O. No. Mis. 2946, Ry., dated the 18th October 1929.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Kulasekarapatnam to Tissianvillai	18-7-15	16·50	
Kulasekarapatnam Sugar factory to Tiruchendur	1-8-22	6·25	
Extension at Tiruchendur to the station yard of Tinnevelly-Tiruchendur Ry.	11-4-23	1·00	23·75
Kulasekarapatnam Central Station to Udangudi	6-3-29	3·00	3·00
Kulasekarapatnam Port to Manapad	1-10-29	0·75	0·75
Less—Kulasekarapatnam Port to Manapad closed for traffic on and from 1st June 1932.	...	..	0·75
Total open mileage	..	..	26·75

Details of construction—

Permanent-way.—The whole of the permanent-way consists of flat-footed steel rails 20 lb. to the yard laid on wooden sleepers.

Ballast.—The line is ballasted with sand.

Fencing.—The line is unfenced.

Curves.—The sharpest curve has a radius of 172 feet.

Gradients.—The ruling gradient is 1 in 100.

Local Government Order—

Madras Government, Local self-Government Department, Order No. 27-L. and M., dated the 4th January 1922, authorising the construction, maintenance and working for public traffic of the line from Tissianvillai to Tiruchendur *viâ* Kulasekarapatnam and G. O. No. 745-Ry. Mis., dated 1st March 1929 and G. O. No. Mis. 2746-Ry., dated 18th October 1929 authorising the Branch lines from central station to Udangudi and from Kulasekarapatnam Port to Manapad respectively for public traffic.

Main provisions of Local Government order—

(i) *Land.*—Private lands on Tissianvillai and Udangudi sections have been acquired through Government and those on the section between Kulasekarapatnam Port and Tiruchendur taken on lease and Government and on all the sections on an annual rental of Rs. 10 per mile.

(ii) *Government aid.*—Nil.

(iii) *Rates and fares.*—The promoters shall not, without the prior sanction of Government, charge higher rates for traffic than the following :—

Rate for passenger .. . Six pies each per mile.

Rate for goods .. .. { 2 pies per maund per mile in truck loads. / 3 pies per maund per mile in smaller loads.

(iv) *Special obligations as to the conveyance of —*

(*a*) Mails, troops, police, high Government officials and Government stores.
(*b*) Government bullion and coin, and the persons in charge thereof.— } *Nil.*

(v) *Power of purchase by the Local Authority.*—Any time after 50 years from the date of the order the Tinnevelly District Board may purchase the line by paying to the promoters twenty-five times the average annual net earnings of the line for the last 5 completed years previous to the date of purchase, subject to a minimum of 100 and a maximum of 125 per cent. of the capital outlay. As regards the section from Factory to Tiruchendur, the promoters shall, at any time that the District Board may extend their line from Tiruchendur to Kulasekarapatnam, be permitted to remove that section of the line.

(vi) *Power of purchase by Government.*—The Government also may purchase the line for twenty-five times the average net earnings of the previous 3 years, subject to a minimum of 100 and a maximum of 120 per cent. of the actual capital outlay, if, at any time, the line be connected with a railway and the proprietors fail to bring the line up to the standard required by the Indian Railways Act.

20. KULASEKARAPATNAM LIGHT RAILWAY (2' 0" gauge)—*contd.*

Statistics of working—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, i.e., outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1915-16 .	18·00	2,86,260	17,630	5,141	2·02	19	70·64
1916-17 .	18·00	2,98,045	79,893	47,150	15·82	85	40·98
1917-18 .	18·00	3,46,325	32,043	—5,052	..	34	115·76
1918-19 .	32·00	5,66,837	41,602	—19,430	..	35	146·70
1919-20 .	32·00	5,84,918	50,369	—41,415	..	30	182·22
1920-21 .	32·00	6,25,278	73,799	—56,100	..	44	176·02
1921-22 .	18·00	6,43,677	66,484	—44,217	..	49	166·30
1922-23 .	24·25	7,17,553	65,045	—55,277	..	56	184·98
1923-24 .	25·25	7,59,271	62,939	—21,714	..	48	134·55
1924-25 .	25·25	7 57,688	70,548	—2,650		54	103·75
1925-26 .	25·25	7,67,275	72,908	9,039	1·18	55	87·60
1926-27 .	25·25	7,72,876	70,059	—31,605	.	53	145·11
1927-28 .	25·25	7,81,924	87,650	11,546	1·47	66	86·82
1928-29 .	26·75	8,24,760	94,744	14,190	1·72	73	85·02
1929-30 .	27·50	8,33,242	1,28,555	42,137	5·05	90	67·22
1930-31 .	27·50	5,45,181	1,30,430	31,681	5·81	91	75·71
1931-32	27·50	5,21,679	1,14,131	19,306	3·70	79	83 08
1932-33 .	26·75	5,40,898	1,09,826	20,557	3·80	78	81·28
1933-34 .	26·75	5,49,389	92,419	6,481	1·18	66	92·99
1934-35 .	26·75	5,54,656	73,657	—2,685	—0·48	53	103·64
1935-36 .	26·75	5,54,295	69,953	1,089	0·19	50	98·44
1936-37 .	26·75	4,91,153	64,158	—56,907	—11·58	46	188·69
1937-38 .	26·75	4,91,049	62,782	—2,016	—0·41	45	103·21
1938-39 .	26·75	4,91,049	51,754	—16,062	—3·27	37	131·03

21. MADRAS PORT TRUST RAILWAY (Mixed Gauge 5′ 6″ and 3′ 3⅜″).

The Madras Port Trust Railway consists of 17·36 miles of mixed gauge railway (5 feet 6 inches and 3 feet 3⅜ inches) of which only 1·70 miles have been passed by the Government Inspector of Railways for the carriage of passengers. The railway is connected with the Madras and Southern Mahratta Railway Co., Ltd., at Royapuram (broad-gauge) and the South Indian Railway Co., Ltd. (metre-gauge section) at Madras Beach Station. The Railway is used for receiving, delivering, transporting, booking and despatching only such goods and for carrying only such passengers as enter or leave the Trust's premises by sea and this has been publicly notified.

The Railway was gradually brought into being for the better performance of the services which the Trust, purely as a Port Trust, is enabled, under its act, to perform for the public within its premises. Up to the 1st November 1916 the duty of delivering incoming goods to consignees and the duty of booking outgoing goods from the Harbour were performed by the neighbouring Madras and Southern Mahratta or South Indian Railway as the case might be. These Railways were provided by the Trust with sufficient accommodation in its premises to carry on their business without the intervention of the Trust. The trust confined itself to the haulage, loading and unloading, of wagons within its premises on behalf of the Railways, while the latter collected from owners on the Trust's behalf the charges levied by the Trust for such services.

Since the 1st November 1916 the booking and delivery of rail-borne goods within the Trust's premises are being carried out by the Trust instead of by the Railways under suitable working agreements.

DETAILS OF CONSTRUCTION.

Permanent-way.—The Permanent-way consists of 75 lb. standard F. F. rails, laid down on either reinforced concrete or timber sleepers, but on revetment tracks 90 lb. section rails are used as these rails are exposed to salt spray.

Ballast.—The line is ballasted with sand.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 400 feet radius.

Gradients.—The line is practically level throughout.

Ownership.—The line is owned and worked by the Madras Port Trust.

Statistics of working.

Year. 1	Mileage open at end of each year. (*b*) 2	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction. 3	Gross earnings. (*a*) 4	Net earnings. (*a*) 5	Percentage of net earnings on total capital outlay given in column (3). (*c*) 6	Earnings per mile per week. (*d*) 7	Proportions of expenses to earning. (*a*) 8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	..	..	..	..	..	..	..
1914-15	..	..	..	..	..	..	..
1915-16	..	..	..	..	..	..	..
1916-17	..	..	..	..	..	..	..
1917-18	..	..	1,30,008	—41,299	..	..	131·77
1918-19	..	..	1,43,474	—64,868	..	..	145·21
1919-20	..	..	2,65,689	—70,875	..	..	126·68
1920-21	..	10,10,410	2,74,240	—73,451	..	..	126·78
1921-22	..	16,10,658	2,79,561	—92,353	..	..	133·04
1922-23	..	16,10,658	3,40,352	—47,872	..	..	114·07
1923-24	..	20,65,025	3,53,263	—63,798	..	..	118·06
1924-25	..	21,63,390	3,97,373	—19,515	..	..	104·91
1925-26	..	21,75,950	3,93,466	—1,59,795	..	..	140·61
1926-27	..	22,71,004	4,16,085	—1,51,373	..	..	136·38
1927-28	..	22,87,342	5,03,069	—1,45,442	..	..	128·91
1928-29	..	24,74,130	5,67,421	—1,55,135	..	..	127·34
1929-30	18·00	25,02,014	5,45,524	—1,12,767	..	582·82	120·67
1930-31	18·00	28,08,202	4,93,472	—2,46,352	..	527·21	149·92
1931-32	18·18	30,44,592	4,46,923	—2,08,213	..	470·17	146·59
1932-33	17·92	30,44,686	3,21,728	—2,62,843	..	344·31	181·70
1933-34	17·81	30,44,686	3,39,647	—1,68,846	..	366·74	149·71
1934-35	17·53	30,44,686	3,33,534	—83,840	..	365·89	125·14
1935-36	17·28	30,44,686	2,83,643	—98,606	..	315·66	134·76
1936-37	17·17	30,44,686	3,22,981	—94,085	..	361·75	129·13
1937-38	17·17	30,79,008	3,28,621	—87,291	..	368·06	126·56
1938-39	17·36	30,92,154	3,71,247	—66,960	..	411·25	118·04

(*a*) The figures are available only from 1917-18, the year in which the Madras Port Trust Railway became a member of the Indian Railway Conference Association.

(*b*) Statistics have not been maintained for each year's length of construction. The total mileage at the end of 1929-30 is about 18 miles.

(*c*) This Railway has been working at a loss, its main earnings being only the harbour terminal charges. Hence the percentage in this column has not been filled up.

(*d*) As the mileage open for each year is not available for the years previous to 1929-30 the figures for 1929-30 and subsequent years only are given.

22. MATHERAN LIGHT RAILWAY (2′ 0″ gauge).

Agents.—Board of Directors, Matheran Steam Light Tramway Co., Ltd., Bombay.

Office.—2nd Floor, 54, Esplanade Road, Fort, Bombay.

A. H. Wadia, Esq., Chairman.

S. L. Panday, Esq., M. B. E., J. P., Managing Director.

Sir Alwyn Ezra Kt., Director: C. H,, Bhabha, Esq., M. A. B.Com., Director; H. H. Master, Esq., Manager.

Date of registration of the Company.—16th September 1908.

Progress in opening—

Section of railway 1	Date of opening. 2	Miles. 3	Total. 4
Neral to Matheran	22-3-07	12·61	12·61

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb. flat-footed steel rails laid on half-round teak and other wood sleepers.

Ballast.—Broken stone.

Fencing.—Not fenced.

Curves.—The sharpest curve is of 60 feet radius.

Gradients.—The Ruling gradient is 1 in 20 compensated.

Local Government Order and Agreement—

The Matheran Tramway order published under the Bombay Government, Public Works Department (Railway), Notification No. 34, dated the 28th July 1904, authorising the construction, maintenance and working of the line by the Promoter

Further order No. 15 of 23rd April 1907 published in the Bombay Government Gazette (Railways).

Further order No. 47 of 19th November 1907 published in the Bombay Government Gazette (Railways)

Letter No. 30, dated the 11th January 1908, from the Secretary to the Government of Bombay, Public Works Department (Railway Branch), to the Promoter, Matheran Light railway.

Letter No. 6-Ry., dated the 13th July 1910, from the Secretary to the Government of Bombay (Railway Branch), permitting to use Petrol motive power.

Further order No. 1434-Ry., dated the 2nd September 1914, published in the Bombay Government Gazette.

Further order No. 297-Ry., dated the 21st Febrauary 1920, published in the Bombay Government Gazette.

Further order No. 2485-Ry., dated the 30th May 1923, published in the Bombay Government Gazette.

Further order No. 12/27, dated the 8th March 1928, published in the Bombay Government Gazette.

Agreement, dated the 12th August 1918 (in supersession of the agreement of 30th October 1909) *between the Matheran Steam Light Tramway Company and the Great Indian Peninsula Railway Company*, as to the control of traffic and working, by the latter of the line with effect from the 1st April 1915. This agreement has been terminated with effect from the 31st March 1926.

Main provisions of Local Government Order and Agreement—

(i) *Land.*—Government land was provided free of cost. Private land to be acquired by the Government at the expense of the Tramway Company whose property it is.

(ii) *Government aid.*—With effect from 1st April 1929 the Matheran Steam Tramway Company have been allowed a rebate of 20 per cent. of the gross earnings of the Great Indian Peninsula Railway from interchanged traffic, subject to withdrawal by either side on one year's notice and limited to the total net earnings from such traffic.

(iii) *Terms of working.*—The line was worked by the Great Indian Peninsula Railway under the agreements, dated 30th October 1909 and 12th August 1918, up to 31st March 1926, when its working was taken over by the Matheran Steam Tramway Company whose property it is.

(iv) *Distribution of profits.*—The whole of the profits belong to the Tramway Company.

(v) *Rates and fares.*—To be within the schedule of maxima and minima rates sanctioned by Government in the Tramway Order of 1904 as amended by subsequent further orders.

(vi) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores—
(*b*) Government bullion and coin, and the persons in charge thereof— } Not specified.

(vii) *Term of agreement.*—Government may purcha e the line as a going concern on the 1st January 1940, or at the expiration of any subsequent period of five years, for a sum representing the aggregate of 25 times the average of its net earnings for the three calendar years immediately preceding the date of purchase.

22. MATHERAN LIGHT RAILWAY (2′ 0″ gauge)—*contd.*

Statistics of working. (Those for the periods prior to 1918-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total Capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Rebate from (+), or share of surplus profits payable to (—), the Great Indian Peninsula Railway under the agreement dated 12th August 1918.	Total income, column (5) + column (7).	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14	12·61	11,38,848	74,545	33,410	2·84	..	..	..	114	55·18
1914-15	12·61	11,38,848	84,325	27,558	2·42	..	..	..	129	67·32
1915-16	12·61	11,38,848	84,185	16,278	1·43	..	..	..	128	80·66
1916-17	12·61	11,41,805	86,664	26,495	2·32	..	..	..	132	69·43
1917-18	12·61	11,42,757	87,222	39,045	2·71	..	..	..	133	64·52
1918-19	12·61	11,49,348	88,170	32,384	2·82	+37,458	69,872	6·08	134	63·27
1919-20	12·61	..	1,08,215	25,590	..	..	25,590	..	225	76·35
1920-21	12·61	Information not available.	1,58,524	10,605	..	+32,499	43,104	..	335	93·31
1921-22	12·61	..	1,34,049	20,250	..	+31,057	1,307	..	259	84·90
1922-23	12·61	..	1,32,050	19,677	..	+29,772	49,449	..	201	85·10
1923-24	12·61	..	1,24,672	20,363	..	+25,923	46,286	..	190	83·67
1924-25	12·61	..	1,21,168	3,598	..	+25,051	28,649	..	185	97·03
1925-26	12·61	.	1,22,441	20,346	..	+23,049	43,395	..	186	83·38
1926-27	2·61					Information not available.				
1927-28	12·61	11,94,882	96,003	—36,997	..	..	..	..	146	138·54
1928-29	12·61	12,03,032	1,11,123	16,292	1·35	..	16,292	..	168	85·58
1929-30	12·61	12,12,782	1,08,214	16,066	1·32	..	16,066	..	165	85·15
1930-31	12·61	12,12,000	1,00,000	20,000	1·65	..	20,000	..	152	80·00
1931-32	12·61	12,20,000	1,02,000	27,000	2·19	..	27,000	..	156	73·52
1932-33	12·61	12,20,000	86,000	3,000	0·25	..	3,000	..	131	96·51
1933-34	12·61	12,20,000	98,000	17,000	1·39	..	17,000	..	149	82·65
1934-35	12.61	12,34,003	88,000	27,000	2·19	..	27,000	..	149	69.32
1935-36	12·61	12,44,000	85,000	27,000	2·17	..	27,000	..	126	68·23
1936-37	12·61	12,44,000	1,01,000	32,000	2·57	..	32,000	..	154	68·31
1937-38	12·61	12,44,000	97,000	18,000	1·40	..	18,000	..	148	81·44
1938-39	12·61	12,44,000	96,000	20,000	1·60	..	20,000	..	146	79·10

NOTE—Rs. 9,149 paid as rebate to the Matheran Steam Light Tramway Company, Limited for 1929-30.

23. TEZPORE-BALIPARA LIGHT RAILWAY (2′ 6″ gauge).

Local Agents.—MESSRS. KILBURN & Co., TEZPORE.

Date of registration of the Company.—2nd October 1893.

This line was authorised for construction under the Indian Tramways Act, 1886, by the Hon'ble the Chief Commissioner of Assam on the 1st June 1895. On the 3rd May 1898, the Indian Railways Act, IX of 1890, except Section 135, was applied to the line.

A tramway, 2 miles long, was constructed at the expense of the Borjuli Tea Company connecting the Borjuli Tea Factory with Rangapara station on the Tezpore-Balipara Light Railway. It was worked by the Tezpore-Balipara Light railway but from February 1908 has been closed to public traffic.

Progress in opening—

Sections of railway.	Date of opening.	Miles.	Total.
1	2	3	4
Tezpore-Ghat to Bindukuri	9-8-94	8·10	
Bindukuri to Balipara	1-9-95	12·00	
TOTAL .	..	..	20·10

Details of construction—

Permanent-way.—The permanent-way consists of 30-lb., 35-lb. and 41¼-lb. flat-footed steel rails on sal and Nahor sleepers only.

Ballast.—The line is unbalasted except at turn-outs.

Fencing.—The line is fenced only at stations.

Curves.—In the first mile there are two curves with radii of 500 feet.

Gradients.—The ruling gradient between Tezpore and Rangapara, 16 miles, is 1 in 125 and between Rangapara and Balipara, 4 miles, 1 in 100.

Local Government orders—

Tezpore-Balipara Steam Tramway Company order, published under the Notification by the Hon'ble the Chief Commissioner of Assam, No. 33, dated the 1st June 1895, as to the construction, maintenance and working of the line.

Main provisions of Local Government orders—

(i) *Land.*—Provided at the cost of the Company, other than that which is not held under decennial *pattas* or where the holders have not acquired land-holders' rights, provided free of cost. Free use of one side of a provincial or local road is authorised for the purpose of laying the line only.

(ii) *Government aid**.—Supply, free of royalty of timber for sleepers from Government forests for the first construction of the line only, and a payment by the Tezpore Local Board, of a subsidy of Rs. 5,000 per annum up to the end of March 1914.

*Letter from the Hon'ble the Chief Commissioner of Assam, No. 3720, dated the 10th November 1893.
Government of India, Public Works Department, letter No. 139-R.C., dated the 2nd February 1894.
Railway Board's letter No. 342-R.T., dated the 22nd February 1909.

(iii) *Distribution of profits.*—The whole of the profits belong to the Company.

(iv) *Rates and fares.*—Control over rates and fares vests in the Local Government, subject to directions issued by the Government of India. Directions issued have taken the form of prescribing maximum and minimum rates and fares.

NOTE.—With effect from 1st April 1938, the control over rates and fares vests in the Government of India.

(v) *Special obligations as to the conveyance of—*

(*a*) Mails, Postal Officers and servants on duty.—Conveyed at the rates and on the conditions in force from time to time on State Railways.

(*b*) Troops, police, high Government officials and Government stores.—
(*c*) Government bullion and coin and the persons in charge thereof.— } *Nil.*

(vi) *Power of the Government to determine contract.*—After the line has been opened for 15 years and thereafter at terms of 7 years each, the Government by giving 12 months' previous notice, have the right to terminate the contract and take over the line by paying to the Company the value of the property as a dividend-earning investment together with a bonus of 20 per cent. over and above such value.

It has since been decided not to give notice of purchase to the Company on the 1st September 1923 and to defer purchase.
[Telegram from the Government of Eastern Bengal and Assam, No. 804-R., dated the 22nd July 1900.]

(vii) *Power of the Company to surrender contract.*—Nil.

(viii) *Term of contract* [*if not determined under* (vi)].—None specified.

23. TEZPORE-BALIPARA LIGHT RAILWAY (2′ 6″ gauge)—*contd.*

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 33 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year.	Mileage open at end of each year.	Total capital outlay, including suspense, to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction.	Gross earnings.	Net earnings.	Percentage of net earnings on total capital outlay given in column (3).	Subsidy from District Board.	Total income.	Percentage of total income on total capital outlay given in column (3).	Earnings per mile per week.	Proportion of expenses to earnings.
1	2	3	4	5	6	7	8	9	10	11
	Miles.	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	
1913-14 .	20·10	4,87,240	1,34,638	40,489	8·31	5,000	45,489	9·33	105	69·93
1914-15 .	20·10	4,87,240	1,35,559	36,620	7·51	..	36,620	7·51	136	72·98
1915-16 .	20·10	4,87,240	1,41,801	44,461	9·12	..	44,461	9·12	139	68·64
1916-17 .	20·10	4,87,240	1,47,201	46,561	9·55	..	46,561	9·55	141	68·37
1917 18 .	20·10	4,87,240	1,33,069	30,034	6·16	..	30,043	6·16	128	77·42
1918-19 .	20·10	4,87,240	1,54,827	47,964	9·84	..	47,964	9·84	149	69·02
1919-20 .	20·10	4,87,240	1,65,769	50,167	10·29	..	50,167	10·29	159	69·73
1920-21 .	20·10	4,87,240	1,43,998	18,019	3·71	..	18,119	3·71	138	87·41
1921-22 .	20·10	4,87,240	1,47,717	13,700	2·81	..	13,700	2·81	141	90·72
1922-23 .	20·10	4,87,240	1,85,737	40,210	8·25	..	40,210	8·25	178	78·35
1923-24 .	20·10	4,87,240	2,04,152	62,502	12·83	..	62,502	12·83	196	69·38
1924-25 .	20·10	4,87,240	1,98,932	59,737	12·26	..	59,737	12·26	191	69·97
1925-26 .	20·10	4,87,240	1,95,273	56,670	11·63	..	56,670	11·63	188	70·98
1926-27 .	20·10	4,87,240	1,92,058	50,236	10·30	..	50,236	10·30	185	73·84
1927-28 .	20·10	4,87,240	1,86,620	37,814	7·76	..	37,814	7·76	179	79·74
1928-29 .	20·10	4,87,240	1,95,388	41,414	8·50	..	41,414	8·50	187	78·80
1929-30 .	20·10	4,87,240	1,88,371	54,328	10·94	..	54,328	10·94	181	71·16
1930-31.	20·10	4,87,240	1,79,162	40,740	8·36	..	40,740	8·36	172	77·26
1931-32 .	20·10	4,87,240	1,78,358	37,805	7·75	..	37,805	7·75	171	78·79
1932-33 .	20·10	4,87,240	1,58,000	48,000	9·73	..	48,000	9·73	151	69·93
1933-34 .	20·10	4,87,240	1,55,000	49,000	10·06	..	49,000	10·06	148	68·71
1934-35 .	20·10	4,87,240	1,53,000	38,000	7·74	..	38,000	7·74	146	75·17
1935-36 .	20·10	4,87 240	1,51,000	35,000	7·13	..	35,000	7·13	144	77·03
1936-37 .	20·10	4,87,240	1,54,000	34,000	6·98	..	34,000	6·98	147	77·71
1937-38 .	20·10	4,87,240	1,63,005	49,328	10·12	..	49,328	10·12	155	69·71
1938-39 .	20·10	4,87,240	1,59,781	40,139	8·23	..	40,139	8·23	152	74·85

24. TRIVELLORE LIGHT RAILWAY (2' 0" gauge).

Promoters.—MESSRS. T. NAMBERUMAL CHETTY AND SONS, MADRAS.

The construction of this line in the district of Chingleput in the Madras Presidency under the provisions of the Indian Tramways Act, 1886, was authorised in Madras Government, Local and Municipal Department, Notification No. 1019, dated the 6th September 1904.

Progress in opening—

Sections of railway. 1	Date of opening. 2	Miles. 3	Total. 4	REMARKS. 5
Trivellore station to Trivellore temple	* 17-9-21	2·12		* This is the date on which the line was included in the list of railways in India.
Extension to Bazaar end		0·25		
TOTAL	..	..	2·37	

Details of construction—

Permanent-way.—The permanent-way consists of 24-lb. and 28-lb. flat-footed steel rails laid on wooden sleepers fixed with spikes and bolts.

Ballast.—The line is packed with gravel.

Fencing.—The line is unfenced.

Curves.—The sharpest curve is of 30 feet radius.

Gradients.—The steepest gradient is 1 in 20.

Local Government orders—

Vendalur and Trivellore Tramways Order, 1904, published under the Madras Government, Local and Municipal Department, Notification No. 1019, dated the 6th September 1904, authorising the construction, maintenance and use for public traffic of the Vendalur and Trivellore tramways.

Trivellore Tramway Extension Order, 1916, published under the Madras Government, Local and Municipal Department, Notification No. 1048, dated the 17th October 1916, authorising the maintenance and working of the Extension.

Main provisions of Local Government orders—

(i) *Land.*—Private land acquired through Government and Government land on rent.

(ii) *Government aid.*—Nil.

(iii) *Rates and fares.*—Passenger fares per mile are not to exceed one-half anna for lower class and one anna for upper class accommodation. In respect of goods the rates are as specified in Schedule B annexed to the order of 1904. No revision in rates and fares should be made without Government sanction.

(iv) *Special obligations as to the conveyance of—*

(*a*) Mails, troops, police, high Government officials and Government stores.—
(*b*) Government bullion and coin and the persons in charge thereof.— } *Nil.*

(v) *Power of the Government to determine contract.*—If the local authority do not, within 6 calendar months after the expiration of a period of 21 years from the date of the Order of 1904, exercise the powers of purchase contained in the Indian Tramways Act, then such powers of purchase shall, unless otherwise agreed to between the promoter and the local authority, only be exercised within 6 calendar months after the expiration of every subsequent period of 7 years. Whenever the powers of purchase contained in the Act shall be exercised by the Local authorities, the amount to be paid to the promoter for the undertaking shall be equal to the then value of the undertaking which shall be taken as being equal to 25 times the average annual net earnings of the Tramway for the last 5 completed years previous to the date of purchase, and the purchase money shall be paid to the promoter, his legal representatives or his or their assignee in Madras in the standard currency of India at the time of purchase or proportionately in the standard in force during the aforesaid 5 years.

Statistics of working—

Year. 1	Mileage open at end of each year. 2	Total capital outlay, including suspense to end of each year, *i.e.*, outlay on (*i*) lines open and (*ii*) lines partly or wholly under construction. 3	Gross earnings. 4	Net earnings. 5	Percentage of net earnings on total capital outlay given in column (3). 6	Earnings per mile per week. 7	Proportion of expenses to earnings. 8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1921-22	2·37	67,158	7,087	—2,284	..	57	132·22
1922-23	2·37	84,637	8,790	—4,653	..	71	152·93
1923-24	2·37	93,264	13,339	2,149	2·30	108	83·89
1924-25	2·37	1,07,695	10,927	—2,176	..	89	110·76
1925-26	2·37	1,15,986	9,936	—1,532	..	80	117·43
1926-27	2·37	1,15,986	7,236	—3,594	..	59	149·65
1927-28	2·37	1,15,986	3,905	—3,406	..	32	189·78
1928-29	2·37	1,16,136	4,509	—1,857	—1·60	37	41·18
1929-30	2·37	1,16,136	4,926	—2,507	—2·16	39	50·89
1930-31	2·37	1,16,136	3,795	—1,586	—1·37	31	41·79
1931-32	2·37	1,16,136	2,888	—2,508	—2·16	23	87·00
1932-33	2·37	1,16,136	2,807	—595	..	23	21·20
1933-34	2·37	1,16,136	2,176	—1,061	—0·86	18	148·76
1934-35	2·37	1,18,136	1,187	—1,983	—1·70	10	267·06
1935-36	2·37	1,18,136	2,062	—2,008	—1·69	17	197·38
1936-37	2·37	1,18,136	1,227	—2,850	—2·54	10	332·27
1937-38	2·37	1,18,136	669	—2,044	..	5	405·53
1938-39	2·37	1,18,136	558	—1,618	—1·37	5	389·96

25. UDAIPUR-CHITORGARH RAILWAY (3′ 3⅜ gauge).

The line was constructed at the expense of the Mewar Durbar, and was maintained and worked by the Bombay, Baroda and Central India Railway Company up to the 31st December 1897. With effect from 1st January 1898 the maintenance and working of the line were taken over by the Durbar.

Running powers—

Home line over Foreign line :—

Bombay, Baroda and Central India Railway, 3′ 3⅜″ gauge, Berach Signal station to Chitorgarh (for passenger and goods trains)/1·44 miles.

Jodhpur Railway, 3′ 3⅜″ guage, near Phulad, 0·20 miles.

Progress in opening—

Sections of Railway. 1	Date of opening. 2	Miles. 3	Total. 4
Berach near Chitorgarh to Debari near Udaipur	1-8-95	60·39	
Separate station at Chitorgarh	15-8-98	0·47	
Debari to Udaipur	25-8-99	6·44	
Mavli junction to Kankroli	1-11-30	18·21	
Kankroli to Garbor Road	20-1-32	24·56	
Garbor Road to Khambli Ghat	16-11-32	22·32	
Khambli Ghat to Phulad Junction	4-2-36	13·25	
Total .	..	..	145·64

Details of construction—

Permanent-way.—The permanent-way consists of :—

On the Udaipur-Berach Section—41¼-lb. flat-footed Steel rails laid on Deodar and Sal Sleepers.

On the Mavli-Khambli Ghat Section.—50-lb. flat-footed Steel rails laid on steel sleepers.

On the Khambli Ghat-Phulad Section.—80-lb. flat-footed steel rails laid on steel and Sal sleepers (Sal Sleepers are used where check rails are fitted).

Ballast.—The ballast consists of broken stone.

Fencing.—The line is fenced between Udaipur and Debari.

Curves.—The sharpest curves on the different Sections have the following radii :—

1,146 feet on the Berach-Debari section, 820 feet on the Debari-Udaipur section, 717 feet on the Mavli-Khambli Ghat section and 360 feet on the Khambli Ghat-Phulad section.

Gradients.—The ruling gradient on the Berach-Khambli Section is 1 in 120, on the Section Khambli to Udaipur it is 1 in 100, on the Mavli-Khambli Ghat section it is 1 in 150 and on the Khambli Ghat-Phulad section it is 1 in 50 compensated.

Contract—

Nil.—The line is owned and worked by the Mewar Durbar.

Statistics of working. (Those for the periods prior to 1913-14 will be found in Appendix 38 to the Railway Administration Report for 1907 and in Appendix 1 to the Report for 1913-14.)—

Year. 1	Mileage open at end of each year. 2	Total capital outlay, including suspense to end of each year, i.e., outlay on (i) lines open and (ii) lines partly or wholly under construction. 3	Gross earnings. 4	Net earnings. 5	Percentage of net earnings on total capital outlay given in column (3). 6	Earnings per mile per week. 7	Proportion of expenses to earnings. 8
	Miles.	Rs.	Rs.	Rs.		Rs.	
1913-14	67·30	22,34,126	3,19,133	1,65,344	7·40	91	48·18
1914-15	67·30	22,40,204	2,65,532	1,07,157	4·78	76	59·64
1915-16	67 30	22,59,354	3,24,163	1,53,016	6·77	93	52·79
1916-17	67·30	22,77,052	3,75,018	1,91,999	8·43	107	48·80
1917-18	67·30	22,84,476	2,76,243	1,31,248	5·75	78	52 48
1918-19	67·30	22,86,112	3,37,620	1,60,789	7·03	96	52·37
1919-20	67·30	22,86,112	4,38,328	2,40,240	10·50	125	45·19
1920-21	67·30	22,86,112	3,62,852	1,66,760	7·29	103	54·94
1921-22	67·30	23,20,117	4,03,814	1,65,984	7·15	115	58·90
1922-23	67·30	24,79,837	4,92,729	1,94,792	7·85	141	60·47
1923-24	67·30	25,72,453	4,75,264	1,53,275	5·96	133	67·75
1924-25	67·30	25,76,005	5,33,667	2,68,689	10·43	152	49·65
1925-26	67·30	26,07,081	5,21,614	2,66,979	10·24	149	48·82
1926-27	67·30	26,22,964	5,02,026	2,20,128	8·39	143	56 15
1927-28	67·30	26,67,161	5,24,497	2,32,279	8·70	150	55·71
1928-29	67·30	29,59,589	5,88,756	3,16,737	10·70	168	46·21
1929-30	67·30	38,81,946	5,60,060	2,12,308	5·47	160	62·09
1930-31	85·51	61,01,113	5,77,420	2,03,285	3·33	148	64·80
1931-32	110·07	73,88,051	5,75,077	2,24,603	3·04	122	60·95
1932-33	132·39	88,41,901	6,02,137	2,03,245	2·30	98	66·25
1933-34	132·39	99,40,796	6,16,914	2,08,336	2·31	89	66·20
1934-35	132·39	1,13,85,173	6,01,822	1,88,066	1·65	87	68·76
1935-36	145·64	1,22,01,212	6,69,312	1,97,624	1·61	88	70·47
1936-37	145·64	1,25,63,233	8,33,118	2,13,134	1·69	118	74·42
1937-38	145·64	1,28,53,368	8,54,765	2,15,612	1·68	113	74·77
1938-39	145·64	1,28,46,600	8,59,787	2,56,831	2·00	114	70·11

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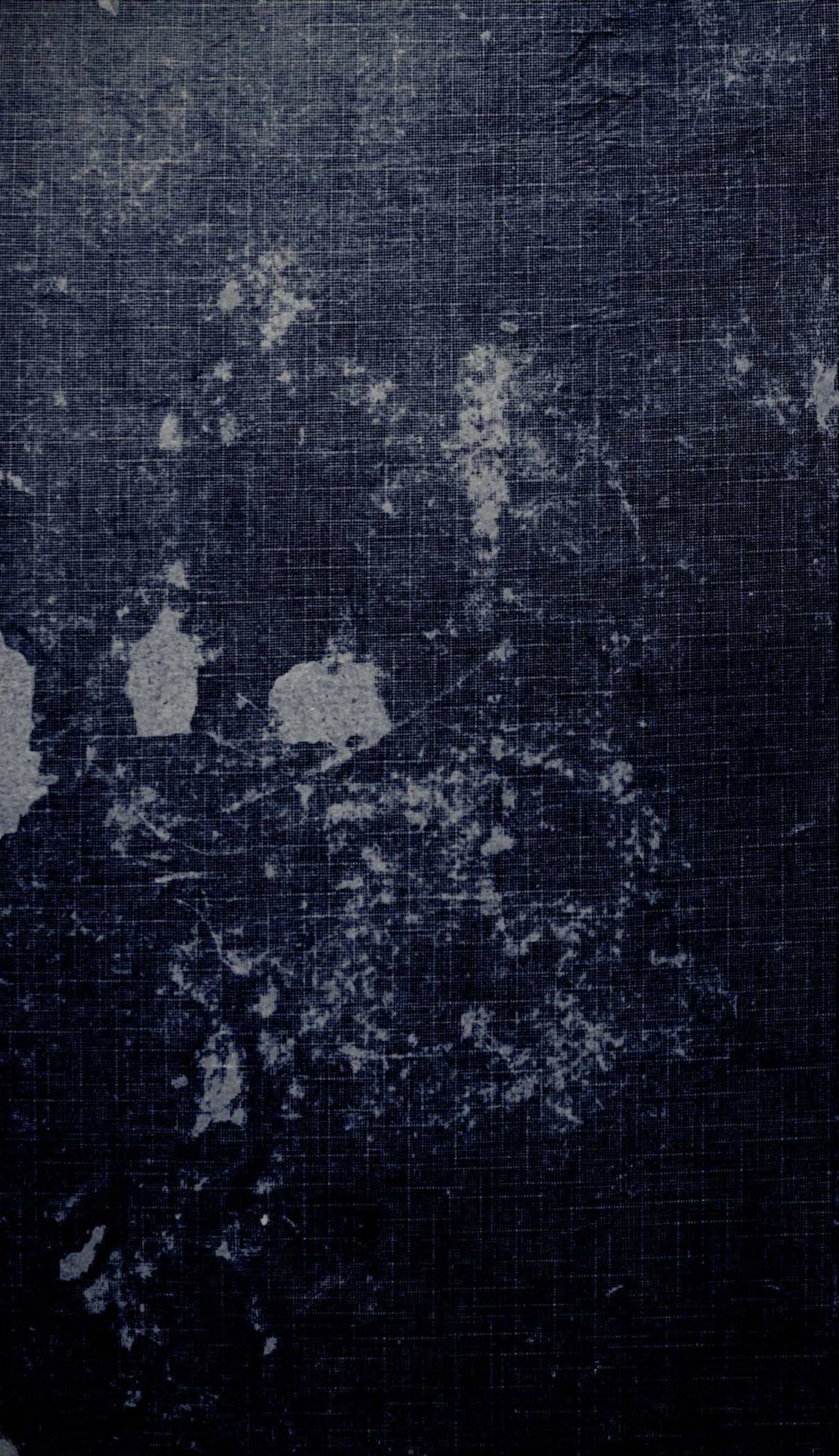
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